



# GeoShield Verification Report 3



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



# GeoShield Verification Report



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]



# GeoShield Verification Report



## CLIENT DETAILS

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

-----

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



# GeoShield Verification Report



## 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.



# GeoShield Verification Report



## INSPECTION AREA(S)

Plots 590 & 591 - Full Line Out  
Plots 592 & 593 - CQA

## SITE CONDITIONS

WEATHER:

Sunny

TEMPERATURE:

23°C

TIME:

12:00 - 13:00

DATE:

12.05.2026

REPORT NUMBER:

003

ACCOMPANIED BY:



# GeoShield Verification Report



## VERIFICATION LAYOUT



The photograph above shows a plan layout of the site. The areas highlighted show Plots 590, 591, 592 & 593 where the verification inspection took place on site today.

CQA photographic evidence has been accepted for the complete line out installation of JUTA GP1 Gas Barrier across the footprint of Plots 592 & 593. All images are included within the 'Additional Photographs' section within this report. No issues were revealed.

CQA photographic evidence has been accepted for the complete line out installation of JUTA GP1 Gas Barrier across the footprint of Plots 592 & 593. All images are included within the 'Additional Photographs' section within this report. No issues were revealed.

## OVERVIEW



The photograph above displays an overview of Plots 590 & 591 where today's verification inspection took place on site.

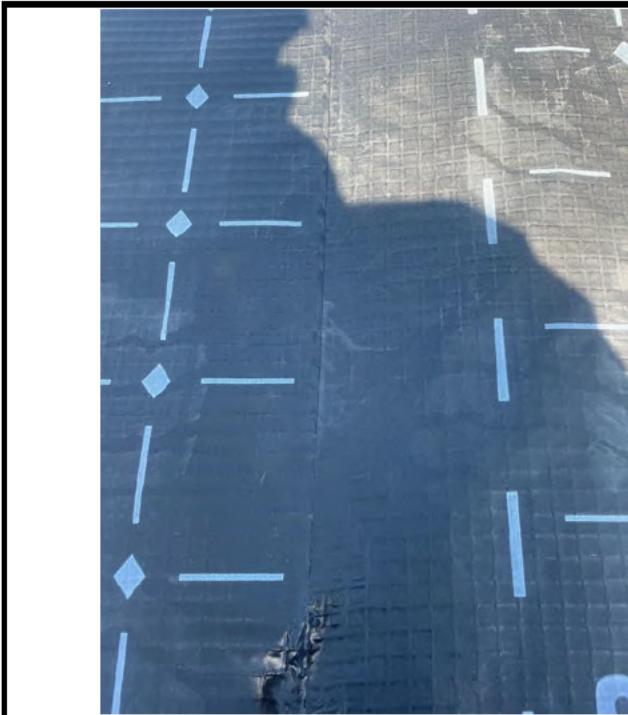
# GeoShield Verification Report



## VERIFICATION ITEM ONE

LOCATION/GRID LINE: Plots 590 & 591 - 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 590 & 591. 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.

# GeoShield Verification Report

## 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.



# GeoShield Verification Report



## VERIFICATION ITEM TWO

LOCATION/GRID LINE: Plots 590 & 591 - 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.

# GeoShield Verification Report

## 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 C735.



# GeoShield Verification Report



## VERIFICATION ITEM THREE

LOCATION/GRID LINE: Plots 590 & 591 - 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.

## 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.



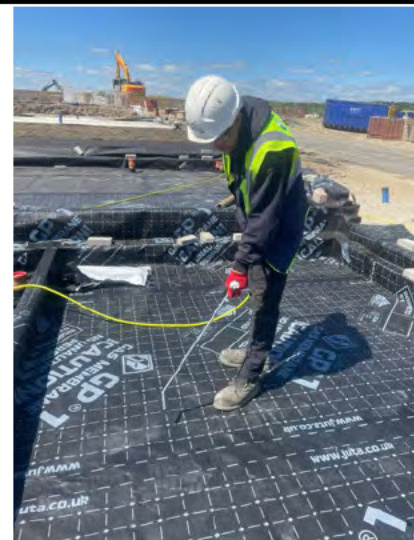
Air lance test on a welded lap.



Air lance test on a corner.



Air lance test on a welded lap.



Air lance test on a welded lap.



# GeoShield Verification Report



## ADDITIONAL PHOTOGRAPHS



CQA photographic evidence of the JUTA GP1 Gas Barrier line out installation within Plots 592 & 593.



CQA photographic evidence of the JUTA GP1 Gas Barrier line out installation within Plots 592 & 593.



CQA photographic evidence of the JUTA GP1 Gas Barrier line out installation within Plots 592 & 593.



CQA photographic evidence of the JUTA GP1 Gas Barrier line out installation within Plots 592 & 593.



# GeoShield Verification Report



## ADDITIONAL PHOTOGRAPHS



CQA photographic evidence of the JUTA GP1 Gas Barrier line out installation within Plots 592 & 593.



CQA photographic evidence of the JUTA GP1 Gas Barrier line out installation within Plots 592 & 593.



CQA photographic evidence of the JUTA GP1 Gas Barrier line out installation within Plots 592 & 593.



CQA photographic evidence of the JUTA GP1 Gas Barrier line out installation within Plots 592 & 593.







# GeoShield Verification Report



## VERIFICATION SUMMARY

This was the third visit to the site where verification was required for the complete line out installation of the JUTA GP1 Gas Barrier to Plots 590 & 591.

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 throughout.

CQA photographic evidence has been accepted for the complete line out installation of JUTA GP1 Gas Barrier across the footprint of Plots 592 & 593. All images are included within the 'Additional Photographs' section within this report. No issues were revealed.

Is the project ready for handover?

No

This was passed and verified in accordance with CIRIA C735 and installed to BS 8485:2015+A1:2019.

GEOSHIELD SIGNATURE



DATE:

12-May-2026