



GeoShield Verification Report 5



PROJECT REFERENCE:

GEO105396

PROJECT ADDRESS:

R4 Civils,
Barlestone,
Barton Road,
Osbaston
Nuneaton,
CV13 0EU

SPECIFICATION:

Verified in accordance with CIRIA 735.

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

Substrate prepared in accordance with
manufacturer's instructions.

MATERIAL SPECIFICATION:

JUTA GP1 Gas Barrier
JUTA GP1 SAM



GeoShield Verification Report



NAME OF SURVEYOR:

Harry Martin

VERIFICATION COMPANY:

GeoShield Limited

COMPANY ADDRESS:

Icon Business Centre

4100 Park Approach, Thorpe Park

Leeds

LS15 8GB

CONTACT NUMBER:

07391 524918

EMAIL ADDRESS:

hmartin@geoshield.co.uk



GeoShield Verification Report



CLIENT DETAILS

CLIENT CONTACT:	Ricky Cooper
CONTACTS ROLE:	Director - Omega Lining Solutions Ltd
MOBILE PHONE:	07817634284
EMAIL ADDRESS:	ricky.c@omega-ls.co.uk



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



GeoShield Verification Report



APPLICATOR'S DETAILS

APPLICATOR NAME: Dom Lombari

COMPANY: Omega Lining Solutions Ltd

APPLICATOR TEL: 07377 406097

APPLICATOR EMAIL:

APPLICATOR NAME:

COMPANY: Omega Lining Solutions Ltd

APPLICATOR TEL:

APPLICATOR EMAIL:

NOTES:

At least one member of each team group will have a NVQ Level 2 qualification in gas membrane installation.

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



GeoShield Verification Report



INSPECTION AREA(S)

Plots 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 43, 44 & 45 - Full Line Out

SITE CONDITIONS

WEATHER: Sunny

TEMPERATURE: 18°C

TIME: 13.00 - 14.00

DATE: 05.09.2025

REPORT NUMBER: 005

ACCOMPANIED BY:

Verification Inspection Information

GEO: 105396 | DATE: 5/9/25

SITE: Barton Road, Nunceaten

WEATHER 18c Sunny.

CLIENT: RL Civils

INSTALLERS: Omega - Don

PLOT/AREA 12.25, 43, 44, 45

TIME 13:00 - 14:00 PHONE:

Juta GFI
Juta GFI Star.

The above photograph shows the details of the verification visit and the materials used.

OVERVIEW



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

OVERVIEW



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

OVERVIEW



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

OVERVIEW



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

OVERVIEW



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

OVERVIEW



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

OVERVIEW



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

OVERVIEW



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

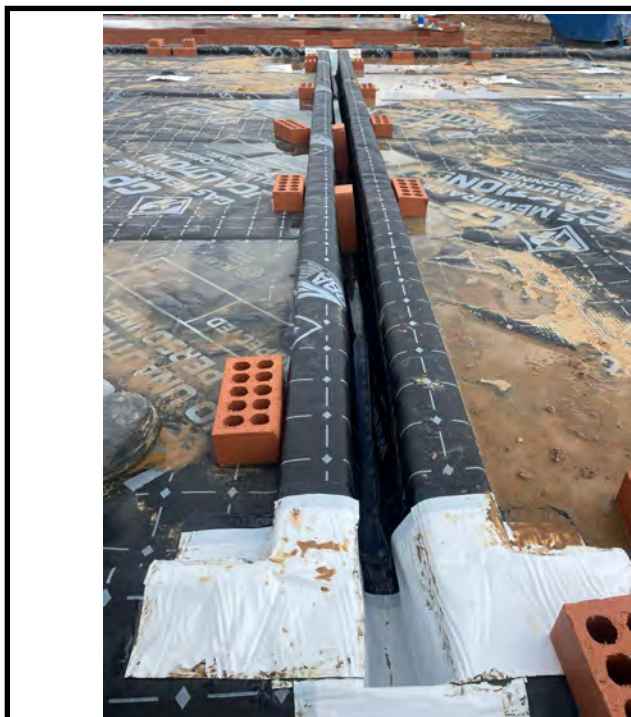
GeoShield Verification Report



VERIFICATION ITEM ONE

AREA INSPECTED: Plots 12 - 25, 43, 44 & 45 - Full Line Out

INSPECTION DETAILS: Installation of JUTA GP1 Gas Barrier



NOTES:

A complete line out of the JUTA GP1 Gas Barrier has been installed across the footprint of the referenced plots, upon an insulated block and beam ventilated sub floor void. The JUTA GP1 Gas Barrier has been lined out across the entirety of the plots, including the internal party walls, ensuring it overlaps



NOTES:

the external cavity to the outer leaf brickwork. All lap joints between the adjacent sheets of JUTA GP1 Gas Barrier have been overlapped a minimum of 100mm and heat welded using a hot air leister and silicone roller with adequate pressure applied to ensure a continuous gas resistant seal is achieved.

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 JUTA GP1 Gas Barrier. Thorough visual inspections, supported by non destructive air lance integrity testing and mechanical point stress testing conducted upon all overlaps, identified one miswelded lap joint.

Tested and verified in accordance with CIRIA 735.



GeoShield Verification Report

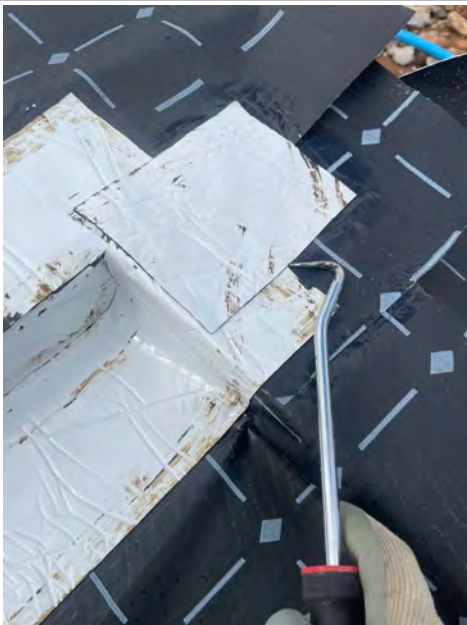


REMEDIATIONS

Misweld Identified and Remediated



As mentioned above whilst carrying out air lance testing across the welded laps, one fault was identified. This was brought to the attention of the installers and remediated on site in the presence of GeoShield.



The installers opted to remediate the fault by applying a 150mm patch of JUTA GP SAM over the affected area. Heat and firm rolled pressure was applied to ensure the JUTA GP SAM had fully bonded. A thorough mechanical point stress test was conducted on the remedial works and identified no faults.



GeoShield Verification Report



VERIFICATION ITEM TWO

AREA INSPECTED: Plots 12 - 25, 43, 44 & 45 - Full Line Out

INSPECTION DETAILS: 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 JUTA GP SAM. The JUTA GP1 Gas Barrier has been cut to minimise any voided areas and gaps across the footprint of the referenced



NOTES:

plots. Each corner and threshold junction has been reinforced by heating strips of JUTA GP SAM and placing them 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 GP SAM has fully bonded.

GeoShield Verification Report



VERIFICATION ITEM THREE

AREA INSPECTED: Plots 12 - 25, 43, 44 & 45 - Full Line Out

INSPECTION DETAILS: Pipe Penetrations



NOTES:

Throughout the 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 design guidelines. This has been achieved using JUTA GP SAM, which is a self adhesive membrane.



NOTES:

The installers have first cut the JUTA GP1 Gas Barrier tight around the base of each pipe penetration to minimise voided areas. Next, strips of JUTA GP SAM are placed intricately in a top hat formation around the pipe penetration and onto the JUTA GP1 Gas Barrier. Heat and rolled pressure is applied to activate the bitumen backing.



GeoShield Verification Report



ADDITIONAL PHOTOGRAPHS



Sealed door threshold.



A sealed pipe penetration.



An overview of the telescopic vent connected to the air brick.



An overview down the cavity wall showing the telescopic vent connecting to the sub floor void.

GeoShield Verification Report

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 a maximum of 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.



Correct pressure achieved.



Air lance testing on a welded lap.



Air lance test on a sealed corner.



Air lance test on a pipe penetration.



GeoShield Verification Report



GAS MEMBRANE TESTING

VISUAL /PICK & PROBE: ☒

AIR LANCING: ☒

DESTRUCTIVE: ☐

INERT GAS TEST: ☐

SMOKE TEST: ☐

DIELECTRIC: ☐

OTHER (PLEASE SPECIFY): ☐

Report No.	AREA INSPECTED	Y/N
001	Plots 1, 2, 3, 4, 35 & 36 - Full Line Out	☒
002	Plots 41 & 42 - Full Line Out	☒
003	Plots 35, 36, 37 & 38 - Full Line Out	☒
004	Plots 26, 27, 28, 29, 30, 31, 32, 33 & 34 - Full Line Out	☒
005	Plots 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 43.....	☒
	44 & 45 - Full Line Out	☒
		☐
		☐
		☐
		☐
		☐



GeoShield Verification Report



VERIFICATION SUMMARY

This was the fifth visit to the site where verification was required for the complete line out installation of the JUTA GP1 Gas Barrier to Plots 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 43, 44 & 45, carried out by Omega Lining Solutions.

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

All details throughout the installation, such as pipe penetrations, thresholds and corners have been sealed using JUTA GP SAM, a self adhesive membrane which has been heated down to aid in the adherence.

Thorough visual inspections, supported by mechanical point stress testing and non destructive air lance integrity testing conducted across all aspects of the installation identified one miswelded lap joint. The misweld was successfully remediated during the visit in the presence of GeoShield.

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

Is the project ready for handover?

No

This was passed and verified in accordance with CIRIA 735 and installed to BS8485:2015+A1 2019.

GEOSHIELD SIGNATURE

DATE:

05-Sep-2025