MARTIN
ENVIRONMENTAL
SOLUTIONS

Contaminated Land Verification Report for a residential development on land at 7-9 Chapel Street, Manchester, M19 3QB.

Prepared for

Burke Developments Ltd,
Norwood,
Greenacres,
Oldham,
OL4 3EX.

Supplementary Information

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1. Introduction

1.1. This report provides supplementary information following comments received from the Council's contaminated land officer on a discharge of condition application relating to the original planning permission for eight units at Chapel Street Manchester, M19 3QB.

1.2. This report covers the works undertaken to remediate the site and should be read in conjunction with the submitted verification report ref: 3052-2 dated October 2025.

2. Verification of Measures Undertaken

2.1. The following verification actions will be undertaken as part of the development.

Gas Membrane:

2.2. A question over the type off gas membrane installed on site has been raised. Appendix A contains an e-mail from the contractor who installed the gas membrane confirming that the correct material was purchased and installed. Appendix A, along with photos of the installed membrane provided by UKRS following their verification visit, Appendix B

2.3. In relation to the construction of the buildings and achievement of the required gas protection score. A gas protection score of 3.5 , sufficient to provide a level of protection for a CS2 situation was required.

2.4. Appendix C contains a copy of the design drawing for the foundations and floor used for the project, which clearly shows the void below the concrete beam and block floor. (This has also been provided separately).

2.5. BS8485 tables 4-7 provide details on the gas protection scoring. The following score has been taken from these tables:

Table	Design	Score Achieved
5 Structural Barrier	Beam & Block	0
6 Ventilation	Clear Void - very good	2.5
7 Membrane	Gas resistant HC Bloc Membrane	2
		4.5

2.6. The required level of gas protection has bene achieved with a score of 4.5 equivalent to a CS3 scenario.

Clean Cover System:

2.7. Concerns have been raised over he no dig barrier installed within the garden areas and the potential for particles to move from below the clean cover system into it.

2.8. The original remediation works resulted in substantial removal of contaminated material from the site, down to over 1m bgl, with clean hardcore brought onto the site to backfill the excavations. No ground water was identified within these areas and subsequent verification monitoring confirmed that the contamination has been removed. See previously submitted reports ref: 2760-1, 2813-1, and 2843-3.

2.9. Therefore, there are no particles to move upwards and a lack of groundwater to move them.

2.10. Furthermore, the finished garden areas have been raised further, see photographs in Appendix D, placing them above the ground level of the new houses and higher than the surrounding land (rear alleyway) to the east, north and east of the site.

2.11. As such should ground water levels rise significantly the water will appear within the surrounding land and site hard standing areas before it infiltrates the new garden areas.

2.12. This would prevent any leaching of any potential contaminants from being drawn in to the clean cover system, while the currently installed barrier will warn anyone digging in the garden.

2.13. With respect to the query over the imported material it has been confirmed that the material was used across all 8 plots and a total of 300 tons of material was imported. The source of the material was a green field site; as per the remediation strategy this required 1 sample every 100m^3. Three samples were taken from the site with a fourth sample of the material provided by the supplier

Figure 1 – Aerial Photograph



Figure 2 – Layout Plan



Appendix A – E-mail from contractor confirming membrane purchased

-------- Original message --------
From: "Clow, Craig" <craigclow@sigplc.com>
Date: 27/02/2026 15:49 (GMT+00:00)
To: burke.developments@btinternet.com
Subject: Chapel street

Hi Keith,

Further to email I can confirm in Dec 2024 brought and installed the Visqueen HC Blok (data attached) on Chapel street. If there is anything else we can help you with please let me know!

Regards,

Craig Clow

Business Development Manager – Construction Accessories Manchester

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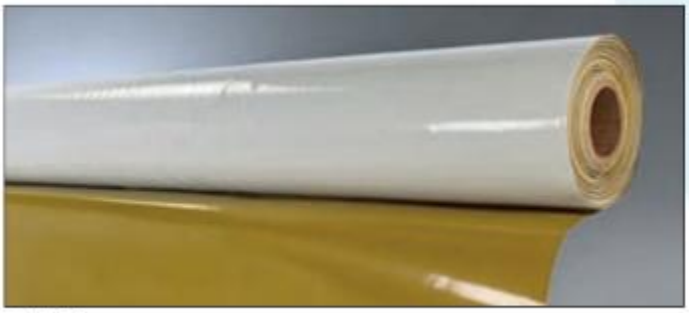
SIG Distribution
Tel - 0161 872 5464 M – 07970 097 582 E - craigclow@sigplc.com
SIG Distribution, Unit 1, Trafford Point, Manchester M17 1SH
W: https://www.sig.co.uk/ Latest Price Changes

Appendix B – Photographs supplied by UKRS taken as part fo the verification visit.





Gas Protection Gas Proof Membranes



Installation

Visqueen Ultimate HC Blok should be loose laid on the substrate with the gold side up so as to avoid sunlight glare. Different jointing options are available depending on product use. Where protection against VOCs or hydrocarbon contamination is required, the barrier should be applied with welded joints.

The barrier should be clean and dry at the time of jointing. It should be overlapped by at least 150mm, bonded with Visqueen 100mm Double Sided Butyl Tape and sealed with Visqueen GR Lap Tape. Alternatively lap joints can be heat welded to achieve an effective seal. The overlap in the barrier is typically 100mm and when hand welding, a 35mm weld is normally achieved. When hand welding, a roller must be used.

For full installation instructions, please see product Technical Datasheet



System components

- Visqueen 100mm Double Sided Butyl Tape, 100mm x 15m
- Visqueen GR Lap Tape, 150mm x 10m
- Visqueen Ultimate Top Hat Units
- Visqueen Ultimate Preformed Units
- VisqueenPro Detailing Strip, 300mm x 10m, 500mm x 10m

Product description

Visqueen Ultimate HC Blok is a 0.5mm thick, chemically resistant co-extruded volatile organic compound barrier and gas barrier. It is coloured gold on the upper surface and white on the reverse. The product is supplied in single wound rolls (not folded), 2.44m x 41m.

Usage

Visqueen Ultimate HC Blok is suitable for use in all types of buildings to prevent the ingress of harmful levels of volatile organic compounds (VOCs). The barrier can be positioned above or below a solid concrete ground floor slab or above a precast suspended segmental ground floor system.

The barrier can also be used in all types of buildings to prevent the ingress of harmful levels of ground gases e.g. methane, carbon dioxide and radon. The barrier also acts as a damp proof membrane. The barrier can be positioned above or below a solid concrete ground floor slab or above a precast suspended segmental ground floor system, e.g. beam and block floor.

The product is not intended for use where there is a risk of hydrostatic pressure.

Features and benefits

- Agrément certified - third party accreditation
- Complies with NHBC Foundation's NF94 guidance for use in Type A and Type B membrane locations
- Complies with CIRIA C748:2014 - industry standard for volatile organic compounds (VOC) protection
- Complies with the methane gas transmission rate, mass per unit area and thickness requirements of BS 8485:2015 + A1:2019 - industry standard for methane and carbon dioxide protection
- Also provides radon and damp proof membrane protection
- Dual jointing methods - depending upon specification, lap joints can be taped or heat welded

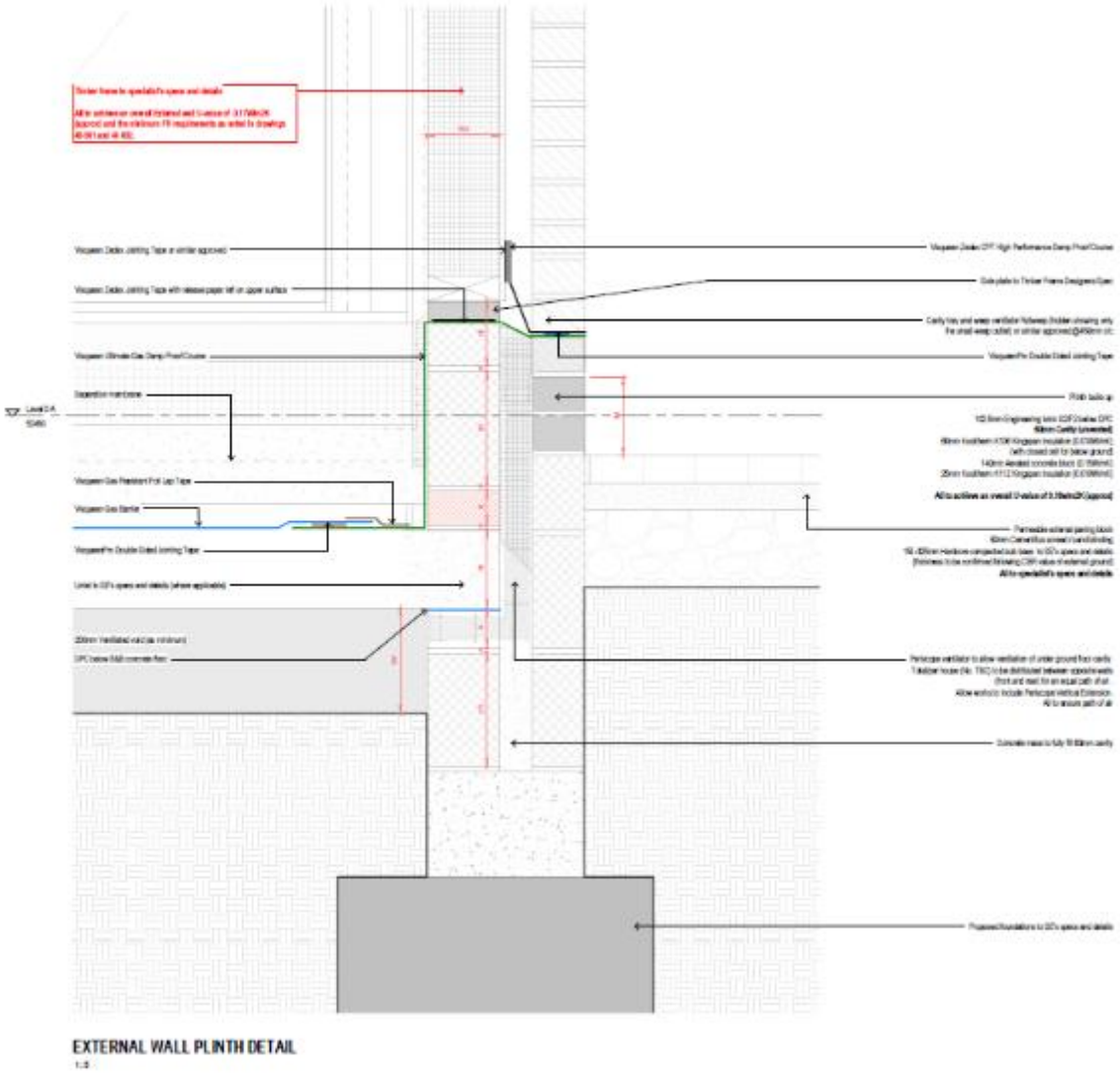
VISQUEEN ULTIMATE HC BLOK

For technical support please call **+44 (0) 333 202 6800** or email **enquiries@visqueen.com**

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Appendix C - Foundation and Floor Design Drawing.

(Also provided as a separate document)



EXTERNAL WALL PLINTH DETAIL

Appendix D – Photo of raised garden areas and topographic plan of the site and surrounding ground.

(Topo plan also provided as a separate document)





TECHNICAL FLOOR PLANS - SITE PLAN