

GAS MEMBRANE VALIDATION

Site: Boothroyden Road, Middleton

Date: 19-11-2021

Project Number: 13-500

Project Manager: N. Sellars

E3P Engineer: R. Webster

Ground Gas Risk Assessment: **Amber 2**

Membrane Specification: Visqueen Ultimate HC Blok

Plots Validated: 28 & 29

Overview:

The membrane comprised a Visqueen Ultimate HC Blok resistant to radon, carbon dioxide and low levels of methane. E3P can confirm there were no holes or rips at the time of inspection.

All external joints were inspected and E3P can confirm that the membrane was welded, with the membrane spanning the floor and cavity.

Each unit has a service duct located to the front and outer edge of the property. E3P inspected each one and can confirm that the top-hats have been adequately sealed against the membrane.

Based on the information provided within this report, the site inspections and validation checklists, E3P can confirm that **Plots 28 and 29** have been installed with gas protection measures in accordance with Amber 2 to an acceptable level of workmanship.



Plot – 28

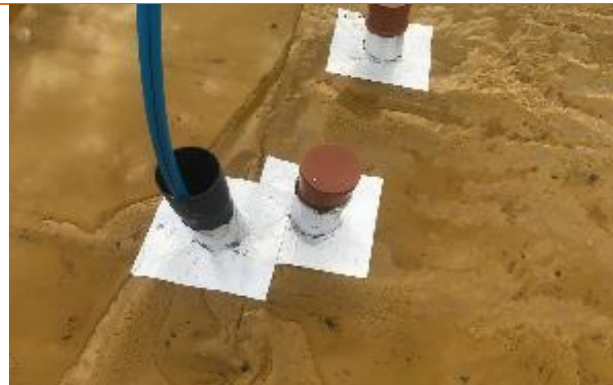
General Condition of Membrane-Good Condition



Verification of Joints and Seals-Good Condition



Verification of Service Penetrations-Good Condition



Verification of Ventilation-Good Condition



Plot - 29

General Condition of Membrane-Good Condition



Verification of Joints and Seals-Good Condition



Verification of Service Penetrations-Good Condition



Verification of Ventilation-Good Condition



Gas Protection Validation Site Record

Inspection date/time:	19/11	Inspected by:	P. Webster	Photographed:	✓/x ✓
Type of development:	Rehabilitation	Plot number:	28	Developer:	

Notes/recommendations	Comments
Membrane Type	(Gold)
Extent of Coverage	fully extends
Underside of Membrane	
Slab / membrane condition (is membrane clear of debris or insulation)	Good
Type of joints	☐ Tape Joint ☒ Welded Joint ☐ Other (please state) (detracting signs)
Service entries - Jubilee clips, Top hats installed correctly	yes
External Wall Air bricks Present?	yes
Corners inspected?	yes
Membrane joints inspected has Double-sided butyl tape been used?	no
Folds in membrane inspected?	yes
Has the membrane been installed as per the design detail drawing?	yes

This Plot has **PASSED/FAILED*** inspection. (Any proposed remedial works will be noted in the "Remarks" column on this form). An additional inspection visit IS/IS NOT required for this Plot.

Inspection by: P. Webster Signed: *[Signature]*

Gas Protection Validation Site Record

Inspection date/time:	19/11	Inspected by:	P. Wroster	Photographed:	✓/x ✓
Type of development:	Redhanger	Plot number:	29	Developer:	

Notes/recommendations	Comments
Membrane Type	(Gold)
Extent of Coverage	fully extends
Underside of Membrane	
Slab / membrane condition (is membrane clear of debris or insulation)	good
Type of joints	☐ Tape Joint ☒ Welded Joint ☐ Other (please state) (detaching strips)
Service entries – Jubilee clips, Top hats installed correctly	yes
External Wall Air bricks Present?	yes
Corners inspected?	yes
Membrane joints inspected has Double –sided butyl tape been used?	no
Folds in membrane inspected?	yes
Has the membrane been installed as per the design detail drawing?	yes

This Plot has **PASSED/FAILED*** inspection. (Any proposed remedial works will be noted in the "Remarks" column on this form). An additional inspection visit IS/IS NOT required for this Plot.

Inspection by: P. Wroster Signed: P. Wroster