

GAS MEMBRANE VALIDATION

Site Name: Belle Vue Stadium	Project Number: 12-123
Company Name: Countryside	Date: 11-07-2022
Project Manager: O. Jackson	E3P Engineer: H. Morgan
PM Qualifications : BSc FGS AMIEnvSc	Engineer Qualifications: Verification of Gas Protection Systems Dec 17

Overview:

The membrane comprised a Visqueen gas membrane (yellow) resistant to radon, carbon dioxide and low levels of methane. E3P can confirm there were no holes or rips at the time of inspection. Upon being laid the membrane is to be covered with a Celotex (closed Cell) floor insulation material which is considered to provide a high degree of protection.

All external joints were inspected and E3P can confirm that the membrane was overlapped and double taped to external and internal gas resistant DPM. The membrane was taped to the gas resistant DPM using a double-sided jointing tape.

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 143-145** have been installed with gas protection measures in accordance with Amber 1 to an acceptable level of workmanship.





Plot – 143

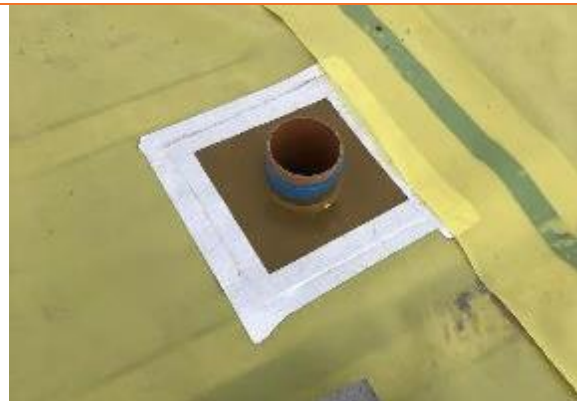
General Condition of Membrane-Good Condition



Verification of Joints and Seals-Overlapped and sealed correctly



Verification of Service Penetrations-Good Condition



Verification of Ventilation-Good Condition



Plot – 144

General Condition of Membrane-Good Condition



Verification of Joints and Seals-Overlapped and sealed correctly



Verification of Service Penetrations-Good Condition



Verification of Ventilation-Good Condition



Plot – 145

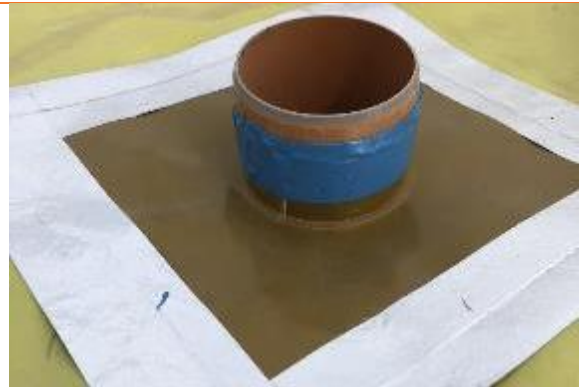
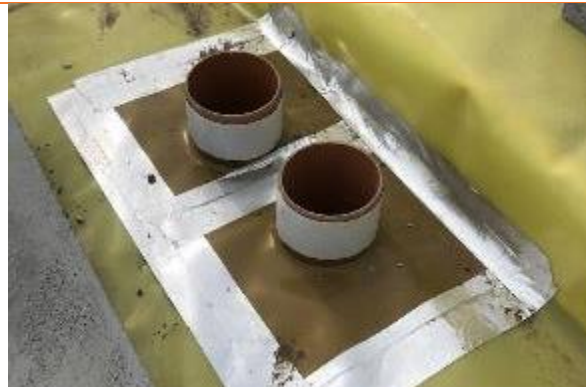
General Condition of Membrane-Good Condition



Verification of Joints and Seals-Overlapped and sealed correctly



Verification of Service Penetrations-Good Condition



Verification of Ventilation-Good Condition

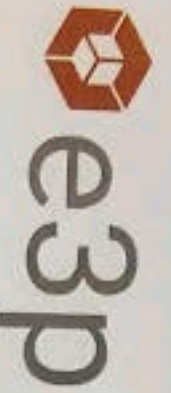




Gas Protection Validation Site Record

Inspection date/time:	11.07.22	Inspected by:	Henry Marsden	Photographed:	✓
Type of development:	Residential	Plot number:	143	Developer:	Covered side
Notes/recommendations		Comments			
Membrane Type		Yellow viscous			
Extent of Coverage		Full			
Underside of Membrane		Clear			
Slab / membrane condition (is membrane clear of debris or insulation)		✓			
Type of joints		☒ Tape Joint ☐ Welded Joint ☐ Other (please state)			
Service entries - Jubilee clips, Top hats installed correctly		✓			
External Wall Air bricks Present?		✓			
Corners inspected?		✓			
Membrane joints inspected has Double -sided butyl tape been used?		✓			
Folds in membrane inspected?		✓			
Has the membrane been installed as per the design detail drawing?		✓			

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: [Redacted] Signed: [Redacted]



Gas Protection Validation Site Record

Inspection date/time:	11.07.22	Inspected by:	Henry Morgan	Photographed:	✓/x
Type of development:	Residential	Plot number:	144	Developer:	Courts side.
Notes/recommendations					
Membrane Type	Yellow Vitrac				
Extent of Coverage	Full				
Underside of Membrane	clear				
Slab / membrane condition (is membrane clear of debris or insulation)	✓				
Type of joints	☒ Tape Joint ☐ Welded Joint ☐ Other (please state)				
Service entries – Jubilee clips, Top hats installed correctly	✓				
External Wall Air bricks Present?	✓				
Corners inspected?	✓				
Membrane joints inspected has Double –sided butyl tape been used?	✓				
Folds in membrane inspected?	✓				
Has the membrane been installed as per the design detail drawing?	✓				

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: [redacted] Signed: [redacted]



Gas Protection Validation Site Record

Inspection date/time:	11.07.22	Inspected by:	Hong Morgan	Photographed:	✓
Type of development:	Residential	Plot number:	145	Developer:	Countesside.
Notes/recommendations					
Membrane Type	Plan Yellow Visceen.				
Extent of Coverage	Full				
Underside of Membrane	Clear				
Slab / membrane condition (is membrane clear of debris or insulation)	✓				
Type of joints	☒ Tape Joint ☐ Welded Joint ☐ Other (please state)				
Service entries - Jubilee clips, Top hats installed correctly	✓				
External Wall Air bricks Present?	✓				
Corners inspected?	✓				
Membrane joints inspected has Double-sided butyl tape been used?	✓				
Folds in membrane inspected?	✓				
Has the membrane been installed as per the design detail drawing?	✓				

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: [Redacted] Signed: [Redacted]