

GAS MEMBRANE VALIDATION

Site Name: Belle Vue Stadium	Project Number: 12-123
Company Name: Countryside	Date: 23-08-2022
Project Manager: O. Jackson	E3P Engineer: J. Newall
PM Qualifications : BSc FGS AMIEnvSc	Engineer Qualifications: GGS Gas Training Feb 22

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.

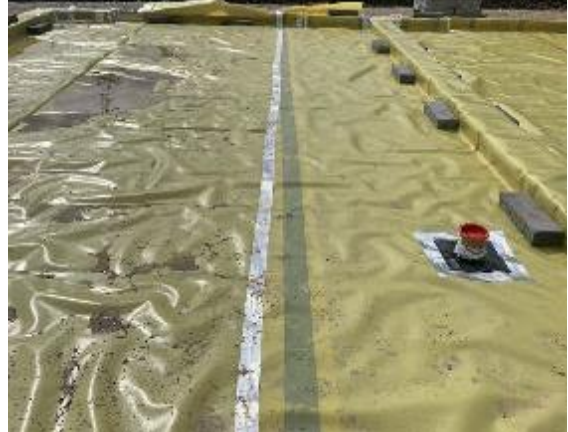
Based on the information provided within this report, the site inspections and validation checklists, E3P can confirm that **Plots 130-133, 136-139** has been installed with gas protection measures in accordance with Amber 1 to an acceptable level of workmanship.



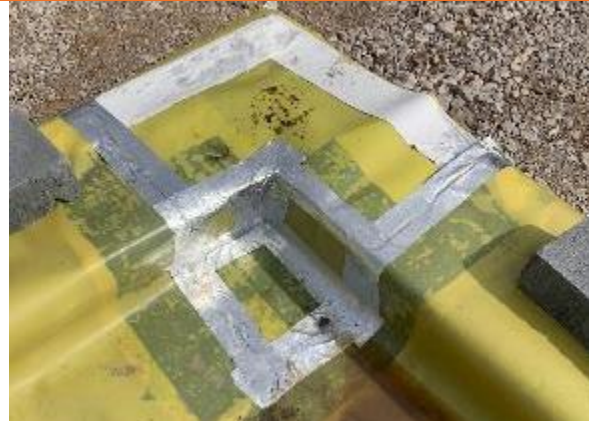


Plot – 130

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

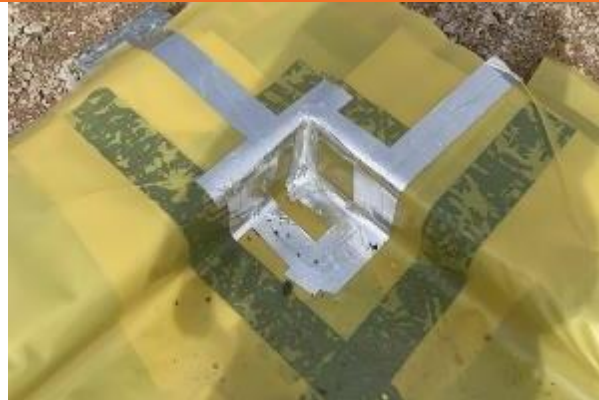


Plot – 131

General Condition of Membrane-Good Condition



Verification of Joints and Seals-Overlapped and sealed correctly



Verification of Service Penetrations-Good Condition

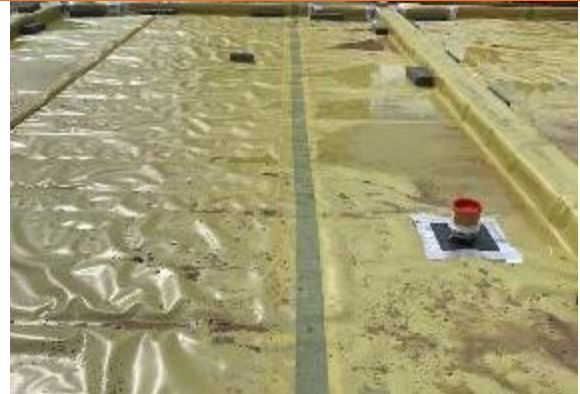


Verification of Ventilation-Good Condition



Plot – 132

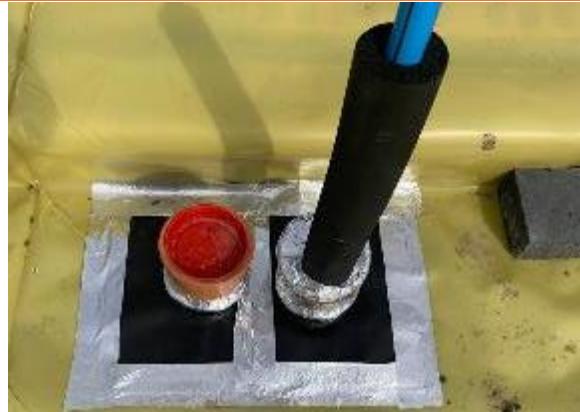
General Condition of Membrane-Good Condition



Verification of Joints and Seals-Overlapped and sealed correctly



Verification of Service Penetrations-Good Condition



Verification of Ventilation-Good Condition



Plot – 133

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 – 136

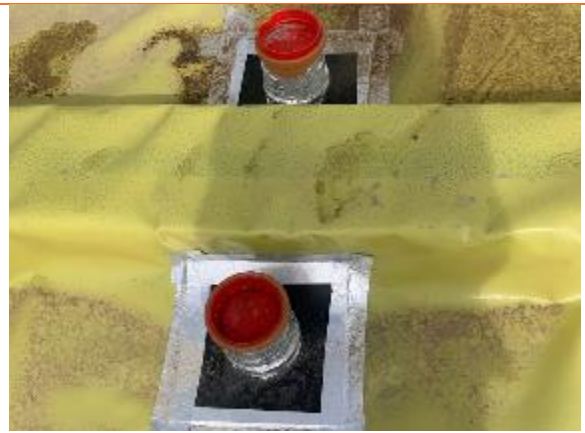
General Condition of Membrane-Good Condition



Verification of Joints and Seals-Overlapped and sealed correctly



Verification of Service Penetrations-Good Condition



Verification of Ventilation-Good Condition

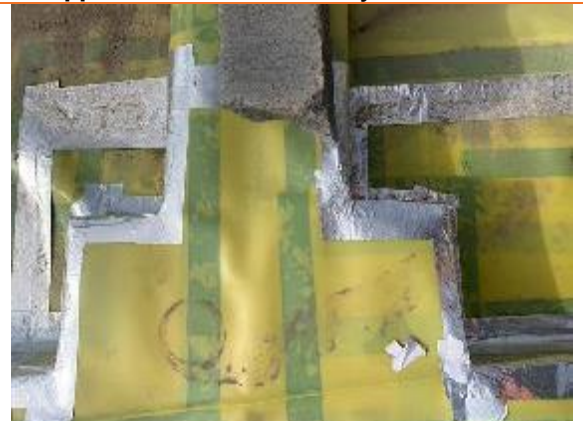


Plot – 137

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 – 138

General Condition of Membrane-Good Condition



Verification of Joints and Seals-Overlapped and sealed correctly



Verification of Service Penetrations-Good Condition

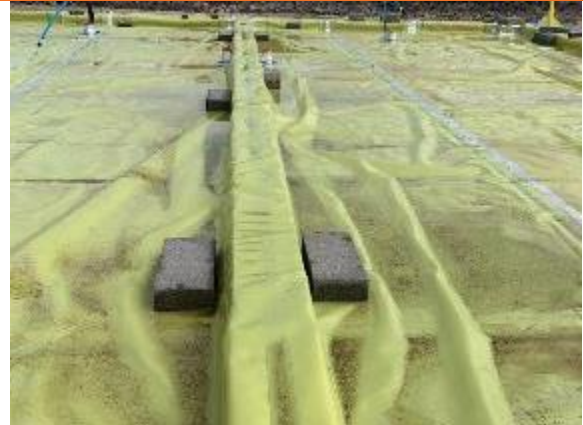


Verification of Ventilation-Good Condition



Plot – 139

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

Bellvue

Inspection date/time:	23/08/22	Inspected by:	J Newall	Photographed:	0/x
Type of development:		Plot number:	130	Developer:	

Notes/recommendations	Comments
Membrane Type	yellow u.s.green.
Extent of Coverage	Full
Underside of Membrane	clear
Slab / membrane condition (is membrane clear of debris or insulation)	yes
Type of joints	☒ Tape Joint ☐ Welded Joint ☐ Other (please state)
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?	yes
Folds in membrane inspected?	yes
Has the membrane been installed as per the design detail drawing?	yes

This Plot has ~~FAILED~~ PASSED 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

Bellvue

Inspection date/time:	23/08/22	Inspected by:	J Newall	Photographed:	Q1x
Type of development:		Plot number:	121	Developer:	

Notes/recommendations	Comments
Membrane Type	yellow v. s. green.
Extent of Coverage	Full
Underside of Membrane	clear
Slab / membrane condition (is membrane clear of debris or insulation)	yes
Type of joints	☒ Tape Joint ☐ Welded Joint ☐ Other (please state)
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?	yes
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: [redacted] Signed: [redacted]



Gas Protection Validation Site Record

Bellvue

Inspection date/time:	23/08/22	Inspected by:	J Newall	Photographed:	01x
Type of development:		Plot number:	132	Developer:	

Notes/recommendations	Comments
Membrane Type	yellow v. square.
Extent of Coverage	full
Underside of Membrane	clear
Slab / membrane condition (is membrane clear of debris or insulation)	yes
Type of joints	☒ Tape Joint ☐ Welded Joint ☐ Other (please state)
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?	yes
Folds in membrane inspected?	yes
Has the membrane been installed as per the design detail drawing?	yes

This Plot has ASSESSED / NOT ASSESSED 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

Bellvue

Inspection date/time:	23/08/22	Inspected by:	J Newall	Photographed:	01x
Type of development:		Plot number:	133	Developer:	

Notes/recommendations	Comments
Membrane Type	yellow visqueen.
Extent of Coverage	full
Underside of Membrane	clear
Slab / membrane condition (is membrane clear of debris or insulation)	yes
Type of joints	☒ Tape Joint ☐ Welded Joint ☐ Other (please state)
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?	yes
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: [redacted] Signed: [redacted]



Gas Protection Validation Site Record

Bellvue

Inspection date/time:	23/08/22	Inspected by:	J Newall	Photographed:	dx
Type of development:		Plot number:	136	Developer:	

Notes/recommendations	Comments
Membrane Type	yellow visqueen.
Extent of Coverage	full
Underside of Membrane	clear
Slab / membrane condition (is membrane clear of debris or insulation)	yes
Type of joints	☒ Tape Joint ☐ Welded Joint ☐ Other (please state)
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?	yes
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: [redacted] Signed: [redacted]



Gas Protection Validation Site Record

Bellvue

Inspection date/time:	23/08/22	Inspected by:	J Newall	Photographed:	01x
Type of development:		Plot number:	127	Developer:	

Notes/recommendations	Comments
Membrane Type	yellow u.s.green.
Extent of Coverage	full
Underside of Membrane	clear
Slab / membrane condition (is membrane clear of debris or insulation)	yes
Type of joints	☒ Tape Joint ☐ Welded Joint ☐ Other (please state)
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?	yes
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: [redacted] Signed: [redacted]

e3p

Gas Protection Validation Site Record

Bellvue

Inspection date/time:	23/08/22	Inspected by:	J Newall	Photographed:	OK
Type of development:		Plot number:	138	Developer:	

Notes/recommendations	Comments
Membrane Type	yellow visagreen.
Extent of Coverage	Full
Underside of Membrane	clear
Slab / membrane condition (is membrane clear of debris or insulation)	yes
Type of joints	☒ Tape Joint ☐ Welded Joint ☐ Other (please state)
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?	yes
Folds in membrane inspected?	yes
Has the membrane been installed as per the design detail drawing?	yes

This Plot has PASSED/NOT PASSED 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: Signed:



Gas Protection Validation Site Record

Bellvue

Inspection date/time:	23/08/22	Inspected by:	J Newall	Photographed:	01x
Type of development:		Plot number:	139	Developer:	

Notes/recommendations	Comments
Membrane Type	yellow v. s. green.
Extent of Coverage	full
Underside of Membrane	clear
Slab / membrane condition (is membrane clear of debris or insulation)	yes
Type of joints	☒ Tape Joint ☐ Welded Joint ☐ Other (please state)
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?	yes
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: [redacted] Signed: [redacted]