E3P
Heliport Business Park
Liverpool Road
Eccles
Manchester
M30 7RU

Manchester | London | Edinburgh

info@E3P.co.uk
www.E3P.co.uk

GAS MEMBRANE VALIDATION

Site: Amberley Drive	
Date: 16-10-2019	Project Number: 10-914
Project Manager: N. Sellars	E3P Engineer: R. Webster
PM Qualifications: MSci (Hons) FGS	Engineer Qualifications: Verification of Gas Protection Systems
Ground Gas Risk Assessment: **Amber 1**	
Membrane Specification: Monarflex Low Permeability Gas Membrane	
Plot Number: 15, 16, 31-36	

Overview:

The membrane comprised a Monarflex low permeability gas membrane 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.

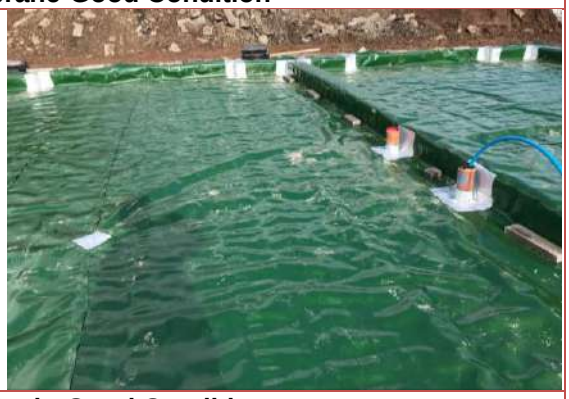
All external joints were inspected and E3P can confirm that the membrane was overlapped and double taped to external and internal gas resistant DPM. The membrane was taped to the gas resistant DPM using a double-sided jointing tape. All the overlaps were then additionally taped using foil backed girth 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 15, 16 and 31-36** have been installed with gas protection measures in accordance with Amber 1 to an acceptable level of workmanship.

Plot - 15

General Condition of Membrane-Good Condition

Verification of Joints and Seals-Good Condition




Verification of Service Penetrations-Good Condition

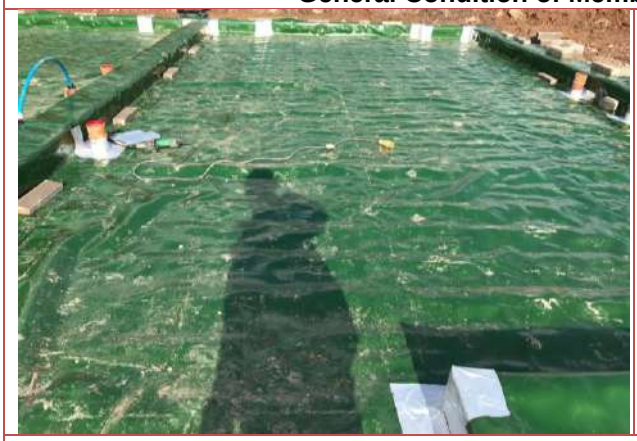



Verification of Ventilation-Good Condition




Plot - 16

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 - 31

General Condition of Membrane-Good Condition




Verification of Joints and Seals-Good Condition




Verification of Service Penetrations-Good Condition

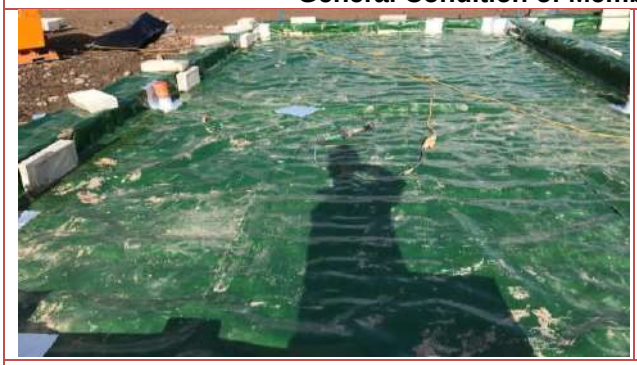



Verification of Ventilation-Good Condition




Plot - 32

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 - 33

General Condition of Membrane-Good Condition




Verification of Joints and Seals-Good Condition




Verification of Service Penetrations-Good Condition

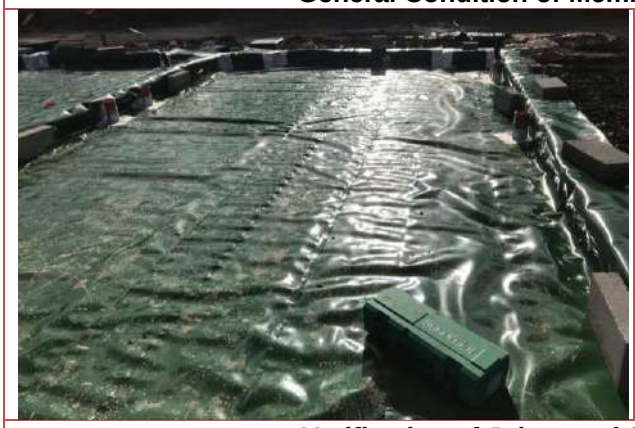



Verification of Ventilation-Good Condition




Plot - 34

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 - 35

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 - 36

General Condition of Membrane-Good Condition




Verification of Joints and Seals-Good Condition




Verification of Service Penetrations-Good Condition




Verification of Ventilation-Good Condition




e3p

Plot No: Amberley Pine plot 15

Gas Protection Validation Site Record

Inspection date/time:	16/10	Inspected by:	R Webster	Photographed:	✓/× ✓

✓/×	Notes/recommendations	
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

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: R Webster Signed: .....

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting.

e3p

Plot No: Amberley Drive plot 16

Gas Protection Validation Site Record

Inspection date/time:	16/10	Inspected by:	R Webster	Photographed:	✓/× ✓

✓/× Notes/recommendations		
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

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: R. Webster Signed:

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting.

Gas Protection Validation Site Record

Plot No: Amberley Drive plot 321

Inspection date/time:	16/10	Inspected by:	R. Webster	Photographed:	✓/× ✓

	✓/×	Notes/recommendations
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

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: R. Webster Signed: .....

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting.

e3p

Plot No: Amberley Drive plot 32

Gas Protection Validation Site Record

Inspection date/time:	16/10	Inspected by:	R. Webster	Photographed:	✓/× ✓

	✓/×	Notes/recommendations
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

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: R. Webster Signed: .....

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting.

e3p

Plot No: Amberley Pine plot [redacted]34 Gas Protection Validation Site Record

Inspection date/time:	16/10	Inspected by:	R Webster	Photographed:	✓/× ✓

	✓/×	Notes/recommendations
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

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: R Webster Signed: .....

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting.

e3p

Plot No: Amberley Drive plot 35

Gas Protection Validation Site Record

Inspection date/time:	16/10	Inspected by:	R. Webster	Photographed:	✓/× ✓

	✓/×	Notes/recommendations
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

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: R. Webster Signed: .....

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting.

e3p

Plot No: Amberley Pine plot 35 **Gas Protection Validation Site Record**

Inspection date/time:	16/10	Inspected by:	R. Webster	Photographed:	✓/× ✓

✓/×	Notes/recommendations	
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

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: R. Webster Signed: .....

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting.

e3p

Plot No: Amberley Drive plot 36

Gas Protection Validation Site Record

Inspection date/time:	16/10	Inspected by:	R. Webster	Photographed:	✓/× ✓

✓/× Notes/recommendations		
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

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: R. Webster Signed: .....

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting.

E3P
Heliport Business Park
Liverpool Road
Eccles
Manchester
M30 7RU

Manchester | London | Edinburgh

info@E3P.co.uk
www.E3P.co.uk

GAS MEMBRANE VALIDATION

Site: Amberley Drive	
Date: 20-11-2019	Project Number: 10-914
Project Manager: N. Sellars	E3P Engineer: T. Preston
PM Qualifications: MSci (Hons) FGS	Engineer Qualifications: Verification of Gas Protection Systems
Ground Gas Risk Assessment: **Amber 1**	
Membrane Specification: Monarflex Low Permeability Gas Membrane	
Plot Number: 17 -18	

Overview:

The membrane comprised a Monarflex low permeability gas membrane 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. All the overlaps were then additionally taped using foil backed girth 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 17 & 18** have been installed with gas protection measures in accordance with Amber 1 to an acceptable level of workmanship.

Plot - 17

General Condition of Membrane-Good Condition




Verification of Joints and Seals-Good Condition




Verification of Service Penetrations-Good Condition

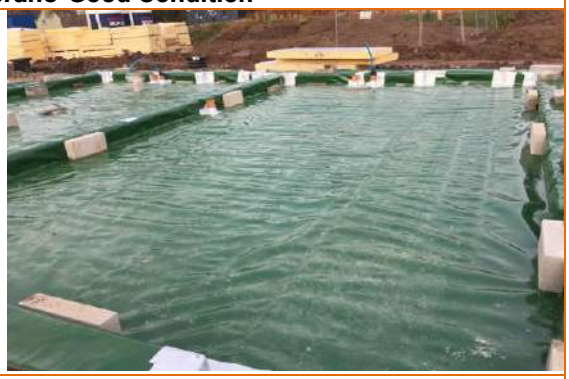



Verification of Ventilation-Good Condition




Plot - 18

General Condition of Membrane-Good Condition

Verification of Joints and Seals-Good Condition




Verification of Service Penetrations-Good Condition




Verification of Ventilation-Good Condition




e3p

GAS PROTECTION VALIDATION

Plot No: 17

Inspection date/time:	20/11/19	Inspected by:	Tom Preston	Photographed:	✓/× ✓

	✓/×	Notes/recommendations
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

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: Tom Preston Signed: Tom Preston

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting

e3p

GAS PROTECTION VALIDATION

Plot No: 18

Inspection date/time:	20/11/19	Inspected by:	Tom Preston	Photographed:	✓/x ✓

	✓/x	Notes/recommendations
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

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 Tom Preston Signed

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting

E3P
Heliport Business Park
Liverpool Road
Eccles
Manchester
M30 7RU

Manchester | London | Edinburgh

info@E3P.co.uk
www.E3P.co.uk

GAS MEMBRANE VALIDATION

Site: Amberley Drive	
Date: 11-09-2019	Project Number: 10-914
Project Manager: N. Sellars	E3P Engineer: T. Preston
PM Qualifications: MSci (Hons) FGS	Engineer Qualifications: Verification of Gas Protection Systems
Ground Gas Risk Assessment: **Amber 1**	
Membrane Specification: Monarflex Low Permeability Gas Membrane	
Plot Number: 19-22	

Overview:

The membrane comprised a Monarflex low permeability gas membrane 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. All the overlaps were then additionally taped using foil backed girth 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 19-22** have een installed with gas protection measures in accordance with Amber 1 to an acceptable level of workmanship.

Plot - 19

General Condition of Membrane-Good Condition




Verification of Joints and Seals-Good Condition




Verification of Service Penetrations-Good Condition

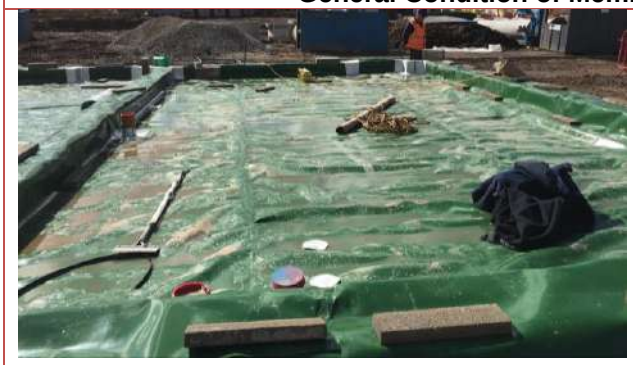



Verification of Ventilation-Good Condition




Plot - 20

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 - 21

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 - 22

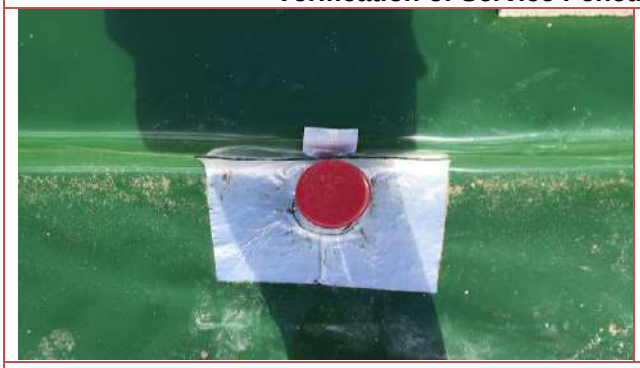
General Condition of Membrane-Good Condition




Verification of Joints and Seals-Good Condition




Verification of Service Penetrations-Good Condition




Verification of Ventilation-Good Condition




e3p

Gas Protection Validation Site Record

Plot No: 19

Inspection date/time:	11/9/19	Inspected by:	Tom Preston	Photographed:	✓/x ✓

	✓/x	Notes/recommendations
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

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: Tom Preston Signed: Tom Preston

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting.

e3p

Gas Protection Validation Site Record

Plot No: 20

Inspection date/time:	11/9/19	Inspected by:	Tom Preston	Photographed:	✓/x ✓

	✓/x	Notes/recommendations
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

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: Tom Preston Signed: Tom Preston

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting.

e3p

Gas Protection Validation Site Record

Plot No: 21

Inspection date/time:	11/9/19	Inspected by:	Tom Preston	Photographed:	✓/x ✓

	✓/x	Notes/recommendations
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

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: Tom Preston Signed: Tom Preston

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting.

e3p

Gas Protection Validation Site Record

Plot No: 22

Inspection date/time:	11/9/19	Inspected by:	Tom Preston	Photographed:	✓/x ✓

	✓/x	Notes/recommendations
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

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: Tom Preston Signed: Tom Preston

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting

E3P
Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Manchester | London | Edinburgh

info@E3P.co.uk
www.E3P.co.uk

GAS MEMBRANE VALIDATION

Site: Amberley Drive	
Date: 29-05-2020	Project Number: 10-914
Project Manager: N. Sellars	E3P Engineer: J. James
Ground Gas Risk Assessment: **Amber 1**	
Membrane Specification: Monarflex Low Permeability Gas Membrane	
Plot Number: 23 & 24	

Overview:

The membrane comprised a Monarflex low permeability gas membrane 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. All the overlaps were then additionally taped using foil backed girth 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 23-24** have been installed with gas protection measures in accordance with Amber 1 to an acceptable level of workmanship.

Plot - 23

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 - 24

General Condition of Membrane-Good Condition




Verification of Joints and Seals-Good Condition




Verification of Service Penetrations-Good Condition




Verification of Ventilation-Good Condition



e3p

Gas Protection Validation Site Record

Plot No: 24

Inspection date/time:	29/5/20	Inspected by:	JJAMES	Photographed:	✓/× ✓

	✓/×	Notes/recommendations
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

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: JAMES JAMES Signed: JJames

e3p

Plot No: 23

Gas Protection Validation Site Record

Inspection date/time:	29/5/20	Inspected by:	JJAMES	Photographed:	✓/x ✓

	✓/x	Notes/recommendations
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

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: Jordan James Signed: .....

E3P
Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Manchester | London | Edinburgh

info@E3P.co.uk
www.E3P.co.uk

GAS MEMBRANE VALIDATION

Site: Amberley Drive	
Date: 16-06-2020	Project Number: 10-914
Project Manager: N. Sellars	E3P Engineer: J. Newall
Ground Gas Risk Assessment: **Amber 1**	
Membrane Specification: Monarflex Low Permeability Gas Membrane	
Plot Number: 25 & 26	

Overview:

The membrane comprised a Monarflex low permeability gas membrane 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. All the overlaps were then additionally taped using foil backed girth 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 25 and 26** have been installed with gas protection measures in accordance with Amber 1 to an acceptable level of workmanship.

Plot – 25

General Condition of Membrane-Good Condition




Verification of Joints and Seals-Good Condition




Verification of Service Penetrations-Good Condition




Verification of Ventilation-Good Condition

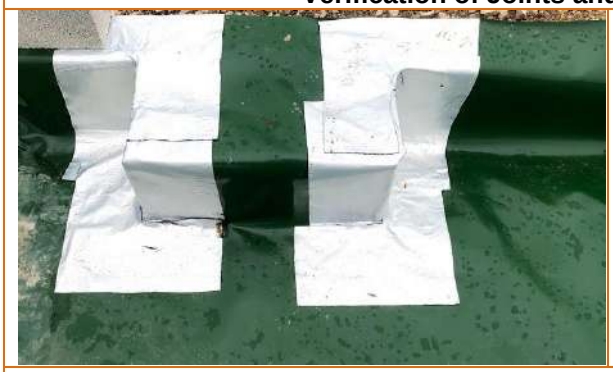



Plot - 26

General Condition of Membrane-Good Condition




Verification of Joints and Seals-Good Condition




Verification of Service Penetrations-Good Condition




Verification of Ventilation-Good Condition




e3p

Plot No: 25

Gas Protection Validation Site Record

Amberley drive

Inspection date/time:	16/05/20	Inspected by:	J Newall	Photographed:	✓/×

	✓/×	Notes/recommendations
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

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: J Newall ..... Signed: .....

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting.

e3p

Gas Protection Validation Site Record

Plot No: 26

Inspection date/time:	16/05/20	Inspected by:	J Newall	Photographed:	✓/×

✓/× Notes/recommendations		
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

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: J Newall ..... Signed: .....

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting.

E3P
Heliport Business Park
Liverpool Road
Eccles
Manchester
M30 7RU

Manchester | London | Edinburgh

info@E3P.co.uk
www.E3P.co.uk

GAS MEMBRANE VALIDATION

Site: Amberley Drive	
Date: 02-12-2019	Project Number: 10-914
Project Manager: N. Sellars	E3P Engineer: T. Preston
PM Qualifications: MSci (Hons) FGS	Engineer Qualifications: Verification of Gas Protection Systems
Ground Gas Risk Assessment: **Amber 1**	
Membrane Specification: Monarflex Low Permeability Gas Membrane	
Plot Number: 27-30	

Overview:

The membrane comprised a Monarflex low permeability gas membrane 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.

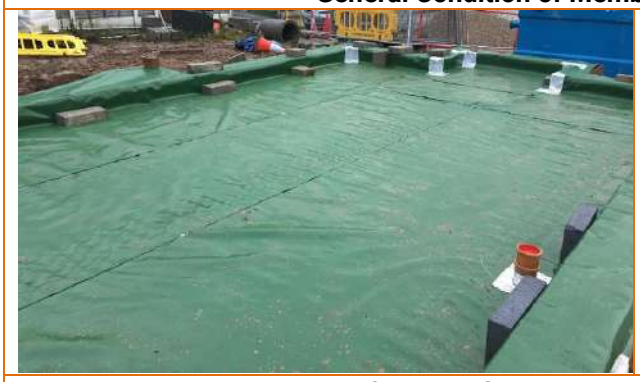
All external joints were inspected and E3P can confirm that the membrane was overlapped and double taped to external and internal gas resistant DPM. The membrane was taped to the gas resistant DPM using a double-sided jointing tape. All the overlaps were then additionally taped using foil backed girth 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 27-30** have been installed with gas protection measures in accordance with Amber 1 to an acceptable level of workmanship.

Plot - 27

General Condition of Membrane-Good Condition




Verification of Joints and Seals-Good Condition




Verification of Service Penetrations-Good Condition

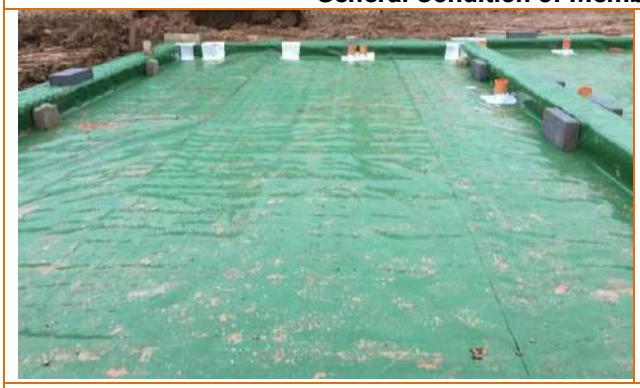
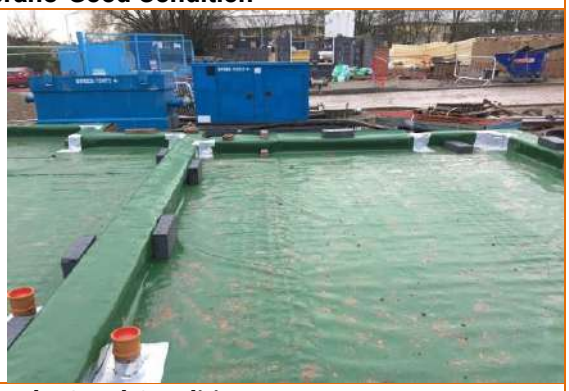



Verification of Ventilation-Good Condition




Plot - 28

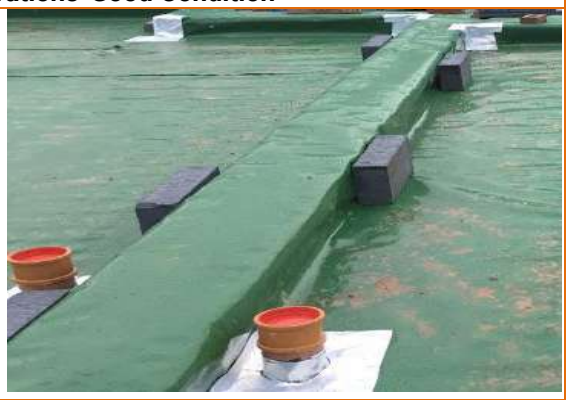
General Condition of Membrane-Good Condition

Verification of Joints and Seals-Good Condition




Verification of Service Penetrations-Good Condition

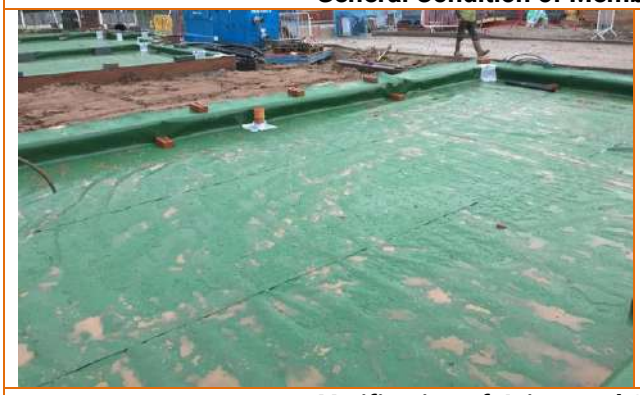



Verification of Ventilation-Good Condition




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




Plot - 30

General Condition of Membrane-Good Condition




Verification of Joints and Seals-Good Condition




Verification of Service Penetrations-Good Condition




Verification of Ventilation-Good Condition




e3p

GAS PROTECTION VALIDATION

Plot No: 27

Inspection date/time:	27/11/19	Inspected by:	Tom Preston	Photographed:	✓/× ✓

	✓/×	Notes/recommendations
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

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: Tom Preston Signed: .....

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting.

e3p

GAS PROTECTION VALIDATION

Plot No: 28

Inspection date/time:	27/11/19	Inspected by:	Tom Preston	Photographed:	✓/x ✓

	✓/x	Notes/recommendations
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & Inspected	✓	

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: Tom Preston Signed: .....

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting.

e3p

GAS PROTECTION VALIDATION

Plot No: 29

Inspection date/time:	27/11/19	Inspected by:	Tom Preston	Photographed:	✓/× ✓

	✓/×	Notes/recommendations
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & Inspected	✓	

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: Tom Preston Signed: .....

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting.

e3p

GAS PROTECTION VALIDATION

Plot No: 30

Inspection date/time:	27/11/19	Inspected by:	Tom Pipkin	Photographed:	✓/x ✓

	✓/x	Notes/recommendations
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

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: Tom Pipkin Signed: .....

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting.

GAS MEMBRANE VALIDATION

Site: Amberley Drive	
Date: 24-07-2019	Project Number: 10-914
Project Manager: N. Sellars	E3P Engineer: J. Newall
Ground Gas Risk Assessment: **Amber 1**	
Membrane Specification: Visqueen Gas Membrane (Yellow)	
Plot Number: 39-46	

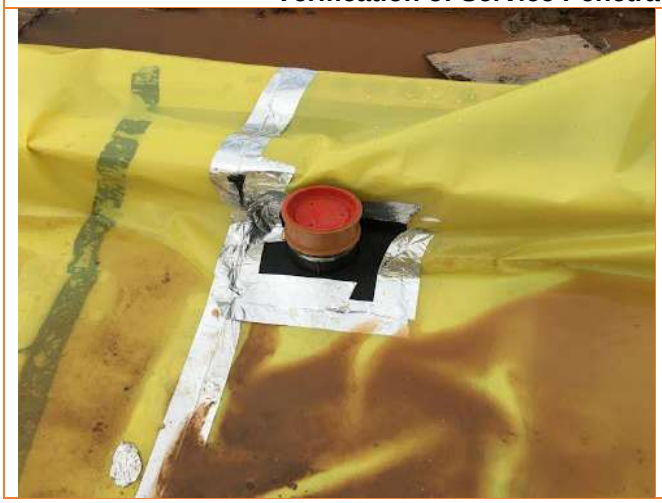
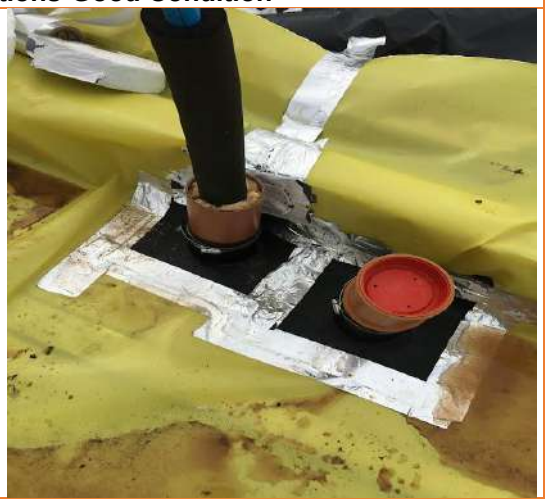
Overview:

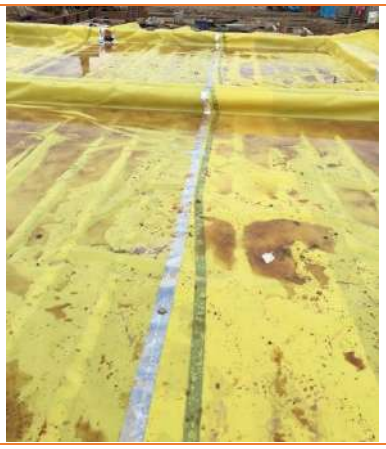
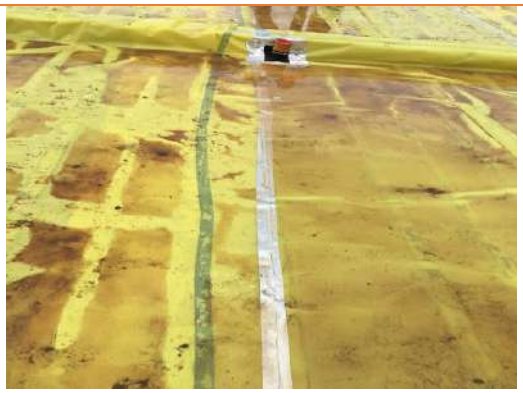
The membrane comprised a Visqueen low permeability gas membrane (Yellow) resistant to radon, carbon dioxide and low levels of methane. E3P can confirm there were no holes or rips at the time of inspection. Upon being laid the membrane is to be covered with a Celotex (closed Cell) floor insulation material 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. All the overlaps were then additionally taped using foil backed girth tape.

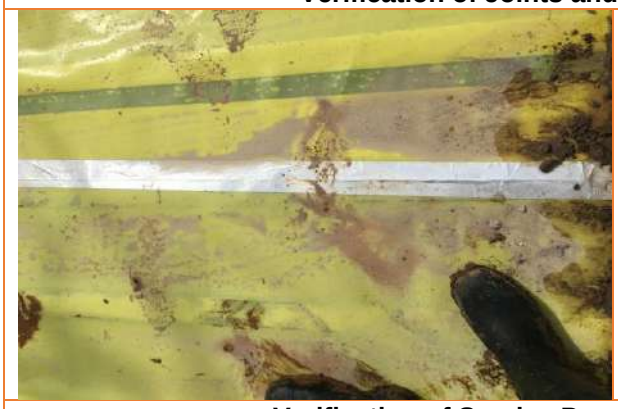
Each unit has a service duct located to the front and outer edge of the property. E3P inspected each one and can confirm that the top-hats have been adequately sealed against the membrane.

Based on the information provided within this report, the site inspections and validation checklists, E3P can confirm that **Plots 39-46** have been installed with gas protection measures in accordance with Amber 1 to an acceptable level of workmanship.

Plot - 39	
General Condition of Membrane-Good Condition	
	
Verification of Joints and Seals-Good Condition	
	
Verification of Service Penetrations-Good Condition	
	

Plot - 40
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 - 41	
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 - 42	
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 - 43
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 - 44

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 - 45

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 - 46	
General Condition of Membrane-Good Condition	
	
Verification of Joints and Seals-Good Condition	
	
Verification of Service Penetrations-Good Condition	
	
Verification of Ventilation-Good Condition	
	

e3p

Gas Protection Validation Site Record

Plot No. 42

Inspection date/time	24/07/18	Inspected by	JN	Photographed	[illegible]

	✓/✗	Notes/recommendations
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

This Plot has PASSED "All F.D" 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: JN Signed: [signature]

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting.

Environmental Engineering Partnership Limited trading as E3P
Registered in England No. 09725262 Registered Office: Heliport Business Park, Liverpool Road, Eccles, Salford, M30 7RU

e3p

Gas Protection Validation Site Record

Plot No. 39

Inspection date/time:	24/07/19	Inspected by:	JN	Photographed:	a.

	√/=	Notes/recommendations
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

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 NOT* required for this Plot.

Inspection by: JN Signed: [signature]

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting.

Environmental Engineering Partnership Limited trading as E3P
Registered in England No. 08720262 Registered Office: Hedport Business Park, Liverpool Road, Eccles, Salford, M30 7RU

e3p

Gas Protection Validation Site Record Ainsley Drive

Plot No: 40

Inspection date/time:	26/07/19	Inspected by:	JN	Photographed:	Ø

	✓/x	Notes/recommendations
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

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

...pection by: J Newell Signed:

...set to be completed for each plot – To be completed by E3P Professional Inspecting

e3p

Gas Protection Validation Site Record

Plot No: 41

Inspection date/time:	24/07/17	Inspected by:	JN	Photographed:	a.

	✓/x	Notes/recommendations
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

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: JN Signed:

One record sheet to be completed for each plot – To be completed by E3P Professional Inspector.

e3p

Plot No: 43

Gas Protection Validation Site Record

Inspection date/time:	24/07/19	Inspected by:	JN	Photographed:	

	-/x	Notes/recommendations
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

This Plot has "PASSED" all ED* 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: JN Signed: [signature]

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting.

Environmental Engineering Partnership Limited trading as E3P
Registered in England No. 08725050 Registered Office: Heliport Business Park, Liverpool Road, Eccles, Salford, M30 7RU

e3p

Gas Protection Validation Site Record

Plot No: 44

Inspection date/time:	24/07/19	Inspected by:	JN	Photographed:	[illegible]

	✓/✗	Notes/recommendations
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

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: JN Signed: [signature]

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting.

Environmental Engineering Partnership Limited trading as E3P
Registered in England No: 08725262 Registered Office: Heliport Business Park, Liverpool Road, Eccles, Salford, M30 7RU

e3p

Plot No: 45

Gas Protection Validation Site Record

Inspection date/time:	24/07/N	Inspected by:	JN	Photographed:	Y

	✓/x	Notes/recommendations
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & Inspected	✓	

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: JN Signed:

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting.

e3p

Plot No: 46

Gas Protection Validation Site Record

Inspection date/time:	24/07/19	Inspected by:	JN	Photographed:	Y

	✓/x	Notes/recommendations
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

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: JN Signed:

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting

GAS MEMBRANE VALIDATION

Site: Amberley Drive	
Date: 17-07-2019	Project Number: 10-914
Project Manager: N. Sellars	E3P Engineer: J. Newall
Ground Gas Risk Assessment: **Amber 1**	
Membrane Specification: Visqueen Low Permeability Gas Membrane (Yellow)	
Plot Number: 47-52	

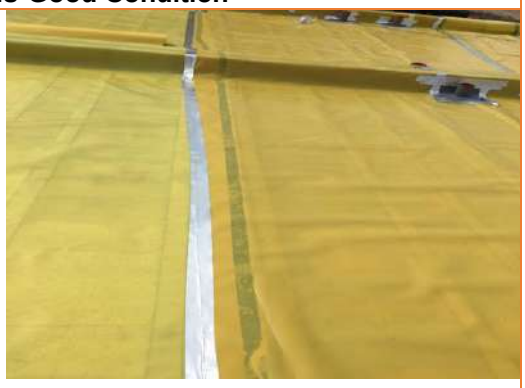
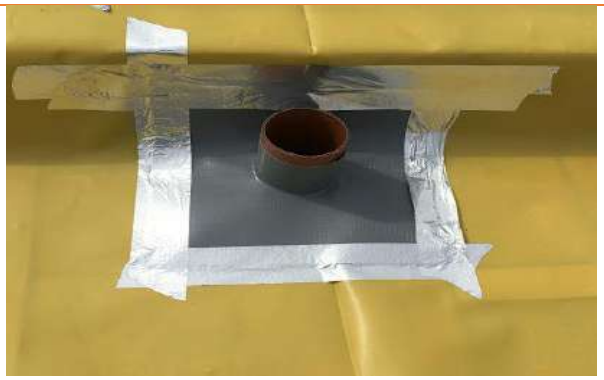
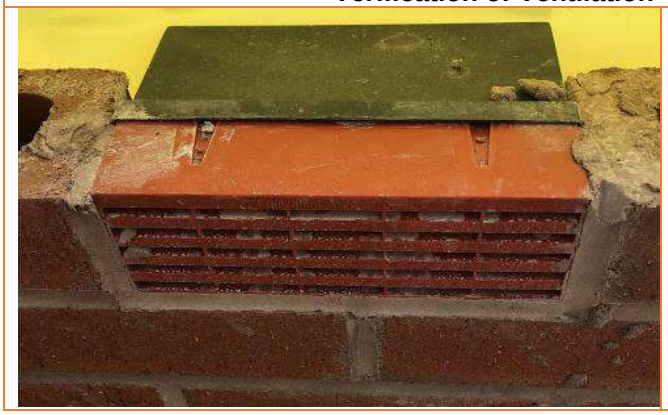
Overview:

The membrane comprised a Visqueen low permeability 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. All the overlaps were then additionally taped using foil backed girth 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 47-52** have been installed with gas protection measures in accordance with Amber 1 to an acceptable level of workmanship.

Plot - 47	
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 - 48	
General Condition of Membrane-Good Condition	
	
Verification of Joints and Seals-Good Condition	
	
Verification of Service Penetrations-Good Condition	
	

Plot - 49
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 - 50	
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 - 51
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 - 52	
General Condition of Membrane-Good Condition	
	
Verification of Joints and Seals-Good Condition	
	
Verification of Service Penetrations-Good Condition	
	
Verification of Ventilation-Good Condition	
	

e3p

47-12

Gas Protection Validation Site Record

Plot No. 47

Amberley drive

Inspection date/time:	19/07/19	Inspected by:	JN	Photographed:	[illegible]

	√/x	Notes/recommendations
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & Inspected	✓	

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: JN Signed: [signature]

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting.

Environmental Engineering Partnership Limited trading as E3P
Registered in England No. [illegible] Registered Office: Hellport Business Park, Liverpool Road, Eccles, Salford, M30 7RU

e3p

Gas Protection Validation Site Record

Plot No: 48

Inspection date/time:	05/03/19	Inspected by:	JN	Photographed:	Yes

	Y/N	Notes/recommendations
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

This Plot has ~~PASSED~~ / ~~FAILED~~ the E3P 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: JN Signed:

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting

e3p

Gas Protection Validation Site Record

Plot No: 09

Inspection date/time:	17/09/19	Inspected by:	JN	Photographed:	Yes

	✓/x	Notes/recommendations
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

This Plot has PASSED/FAILED inspection. (Any proposed remedial works will be noted in the "Remarks" column on this form).

An additional inspection visit (WAS NOT) required for this Plot.

Inspection by: JN Signed:

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting

e3p

Gas Protection Validation Site Record

Plot No: 50

Inspection date/time:	12/02/19	Inspected by:	JU	Photographed:	Y

	✓/✗	Notes/recommendations
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

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: JU Signed:

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting.

e3p

Gas Protection Validation Site Record

Plot No: 51

Inspection date/time:	17/07/12	Inspected by:	JU	Photographed:	D.

	✓/×	Notes/recommendations
Membrane Type Correct	✓	
Extent of Coverage Correct	✓	
Underside of Membrane	✓	
Slab / membrane condition	✓	
Laps and joints	✓	
Damp-proof course	✓	
Service entries	✓	
Folded Membrane Joint Taped & inspected	✓	

This Plot has PASSED/FAILED* inspection. (Any proposed remedial works will be noted in the "Remarks" column on this form).

An additional watch over visit IS/IS NOT* required for this Plot.

Inspection by: JU Signed:

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting

e3p

Gas Protection Validation Site Record

Plot No: 52

Inspection date/time:	12/09/19	Inspected by:	TV	Photographed:	✓

	✓/✗	Notes/recommendations
Membrane Type Correct	—	
Extent of Coverage Correct	—	
Underside of Membrane	—	
Slab / membrane condition	—	
Laps and joints	—	
Damp-proof course	—	
Service entries	—	
Folded Membrane Joint Taped & inspected	—	

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: TV Signed:

One record sheet to be completed for each plot – To be completed by E3P Professional Inspecting