

Elivia Homes Ltd

F.A.O Paul Spratt

Via email only: paul.spratt@eliviahomes.co.uk

CC: Fiona.Goode@eastleigh.gov.uk; David.Huckfield@eastleigh.gov.uk

9th September 2022

Our Ref.: 18831/LR/Validation Plots 1-50 and 81-93

Dear Paul,

Re: Additional Gas Membrane Validation Plots 1-50 and 81-93, Abbey Fruit Farm, Netley, SO31 5FF

We are writing regarding the validation of the agreed RMS (Soils Limited 18831/LR Dated 20th November 2020) relating to Abbey Fruit Farm, Netley, Hampshire SO31 5FF. An updated version was requested to include responses and clarifications relating to comments made by the regulator in January 2022 following the initial presentation of this validation document for partial planning compliance on Plots 51-80 on 24th November 2021.

This report is a factual addendum to the previous report (Soils Limited 18831/LR/Validation Plots 51-80 and WS304 Remediation/V1 dated 1st February 2022) and includes gas membrane verification and validation data for the remaining site locations i.e. Plots 1-50 and 81-93, and must be read in conjunction with the previous report as an addendum. Therefore, this report does not duplicate the RMS soil validation actions and validation undertaken at the site, which lay within the Plot 51-80 area of the site and has already been agreed with the regulator.

Brief

Crayfern Homes (now Elivia Homes) commissioned Soils Limited to provide a Remediation Method Statement (RMS) and undertake validation and verification as detailed in the previous report, which we understand has been accepted by the regulator. To avoid unnecessary duplication, this factual addendum report therefore only relates to the CS2 compliant gas membrane validation of Plots 1-50 and 81-93.

A copy of the Site Location is enclosed as Figure 1 and an Aerial Photograph as Figure 2.



This report should therefore be read in conjunction with the following Soils Limited report references as accepted and notified to the regulator:

- Phase II Ground Investigation Report – ref 15818/GIR dated October 2016 by Soils Ltd
- Soil Gas Risk Assessment Letter Report – ref LET2-14022/JSH dated May 2016 by Soils Ltd
- Soil Contamination Survey Report – ref 16771/SCS dated April 2018 by Soils Ltd
- Supplementary Investigation Report – ref 17798/MIR_R27 dated October 2019 by Soils Ltd
- Landfill Letter Report – ref 16771/LR dated October 2019 by Soils Ltd
- Remediation Method Statement and Validation Report – ref 18831/LR/Validation Plots 51-80 and WS304 Remediation/V1 dated 1st February 2022 by Soils Ltd

Remediation Requirements – Gasses

As part of works previously undertaken by Soils Limited, it was initially established that there was a potential risk from adjacent landfills – some of which continue to produce gas and leachate though none are currently actively receiving waste materials. Site monitoring and consideration of the underlying ground (largely cohesive) indicated that this risk and the groundwater risks (for the same reasons) was liable to be low to negligible. In the absence of any on-site sources and restricted pathways and combined with on-site monitoring, no site or area specific protection measures were either required or indicated (Soil Gas Risk Assessment Letter Report – ref LET2-14022/JSH dated May 2016 by Soils Ltd).

However, the regulator considered and expressed the view that there remained a potential risk of gas at elevated concentrations and pressures reaching the site if (for example) protection measures at the adjacent off-site landfill facilities were to fail, and that therefore a precautionary approach should be followed in relation to gas risks at adjacent residential sites and developments.

Following consultation, options appraisal and risk assessment in line with current recommendations and guidance during 2018-2021, it was agreed that emplacement of suitable precautionary gas protection to CS2 in all residential structures be undertaken as standard. This level of protection would provide appropriate precautionary cover against isolated events producing elevated levels or concentrations of gas should the adjacent landfills fail, especially in light of the open spaces, gardens etc. around and within the development that would allow such gases to preferentially escape to atmosphere.

The installation, verification and validation of individual and group plots in relation to emplacement of the agreed protection measures across plots 1-50 and 81-93 have been enclosed as Appendix 1. Note that where properties are multi-level or multiple occupancy i.e. flats above ground floor levels or flats over garages (FOG), only the ground floors of these properties or in the case of FOG Plots the access area, have been remediated and validated, in line with current guidance.

To clarify the situation with regards to the gas membranes as requested by the regulator, works undertaken at all locations followed a two-phased approach with partial membranes

being installed as part of the initial build so that they would allow building to continue before being incorporated into the final floor level installation, thereby reducing the risk of damage during construction. This was agreed with the regulator and the initial validation report for plots 51-80 (18831/LR/Validation Plots 51-80 and WS304 Remediation/V1 dated 1st February 2022 by Soils Limited) further detailed this process in Appendix 2 of that report detailing the typical foundation and installation details and confirming their compliance with CS2 as subsequently validated by Soils Limited.

Method statements, risk assessment and certificates of conformity from the contractor relating to the previous locations (Plots 51-80) as reported previously in 18831/LR/Validation Plots 51-80 and WS304 Remediation/V1, remained valid throughout these further works and in conformity at all locations noted in this report.

As previously noted, plans for each specific plot (as PDF or DWG) can be provided if requested and were provided to the installer for reference at each location. The documentation and method statements previously provided confirmed and accepted by the regulator that the two phased approach was valid and agreed such that emplacement of wood frames atop the initial installations would not in and of itself invalidate the protection provided as the frames would essentially be self-sealing on installation.

Conclusions

Soils Limited as part of its duty of care in regard to validation and appreciating that this was a two phased approach, did undertake initial validations at certain locations as previously noted and following the comments of the regulator did undertake further initial investigations to ensure and confirm that the first phase of the process was being undertaken correctly and that no such loss of protection was being caused by this initial activity and the separation of the installation into two phases. This was confirmed as part of the final validation of the plot as expressed in the certification. In light of regulator comments, this was specifically undertaken for the final group of plots to be emplaced and others during the works to ensure continuity of process throughout.

Where two dates are noted on certification, the first date was that of the validation of the first phase of emplacement. During the works this was initially only reported informally to the developer. However, following the regulators observation this was specifically undertaken and reported for Plots 4-6 for QA/QC purposes to confirm compliance. This is detailed and referenced through provision of an initial installation photographic record for selected plots (Appendix 2).

Soils Limited are satisfied on the basis of the initial investigations and validation on completion combined with the above noted QA/QC, that no pathway is present because of the installation of timbers or brickworks over pre-installed preliminary phase gas protection. This should also be understood in the context of the validation certification provided therefore relating by default to both phases of the installation and development process and confirming compliance and validation of both phases of installation.

Soils Limited can now formally confirm that with the addition of these plot certifications (1-50 and 81-93) and its observations on site and QA/QC appraisal that all gas protection works

appear to have been undertaken in compliance with the agreed gas protection requirements and in compliance with the specifications provided.

Soils Limited hereby formally validate and verify that the installations for which certification is provided in this report were compliant on completion with the RMS CS2 mandated precautionary protection levels required and as agreed with the regulator. The wording of the validation certification should be understood to read that both the initial and second parts of the two-phase installation process are both validated by default in the certification provided.

Should you have any further questions or require additional specific evidence of compliance (for example specific plot plans or additional initial installation validation and photographs) please do not hesitate to contact the undersigned.



C Swainston BSc, PGCE, CGeol, FGS, CLAIre QP MIAH
Principal Environmental Engineer
cs@soilslimited.co.uk
For and on behalf of Soils Limited

The following attachments make up the remainder of this factual report.

Figure 1. Site Location Plan

Figure 2. Aerial Photograph predevelopment

Appendix 1. Gas Validation Certificates Plots 1-50 and 81-93 Ground Floors.

Appendix 2. Validation of Initial Installations Plots 4-6

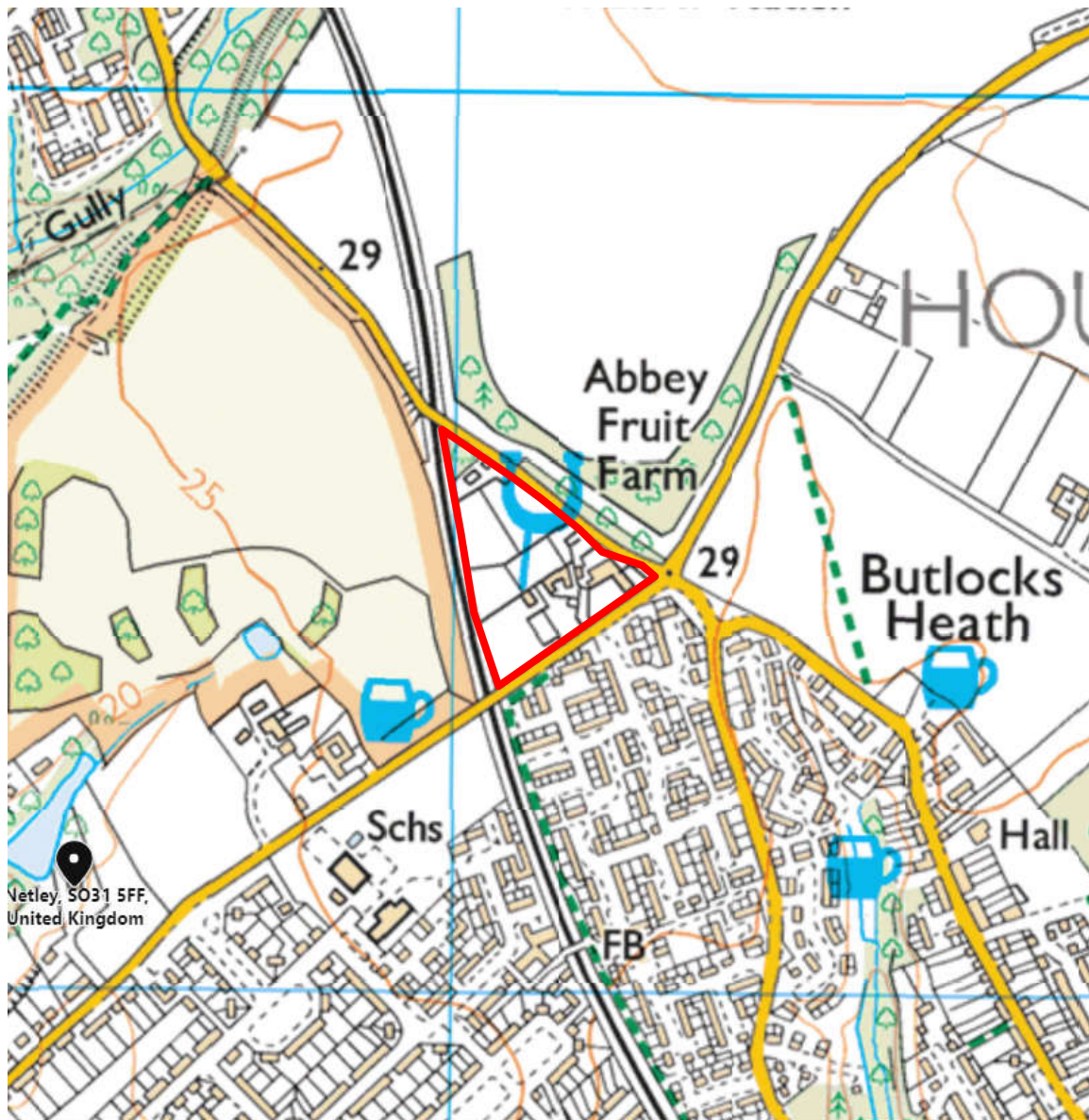


Figure I – Site Location Map

Job Number
18831

Project
Abbey Fruit Farm, Grange Road, Netley, Hampshire
SO31 5FF

Client
Crayfern Homes

Date of Map
October 2001

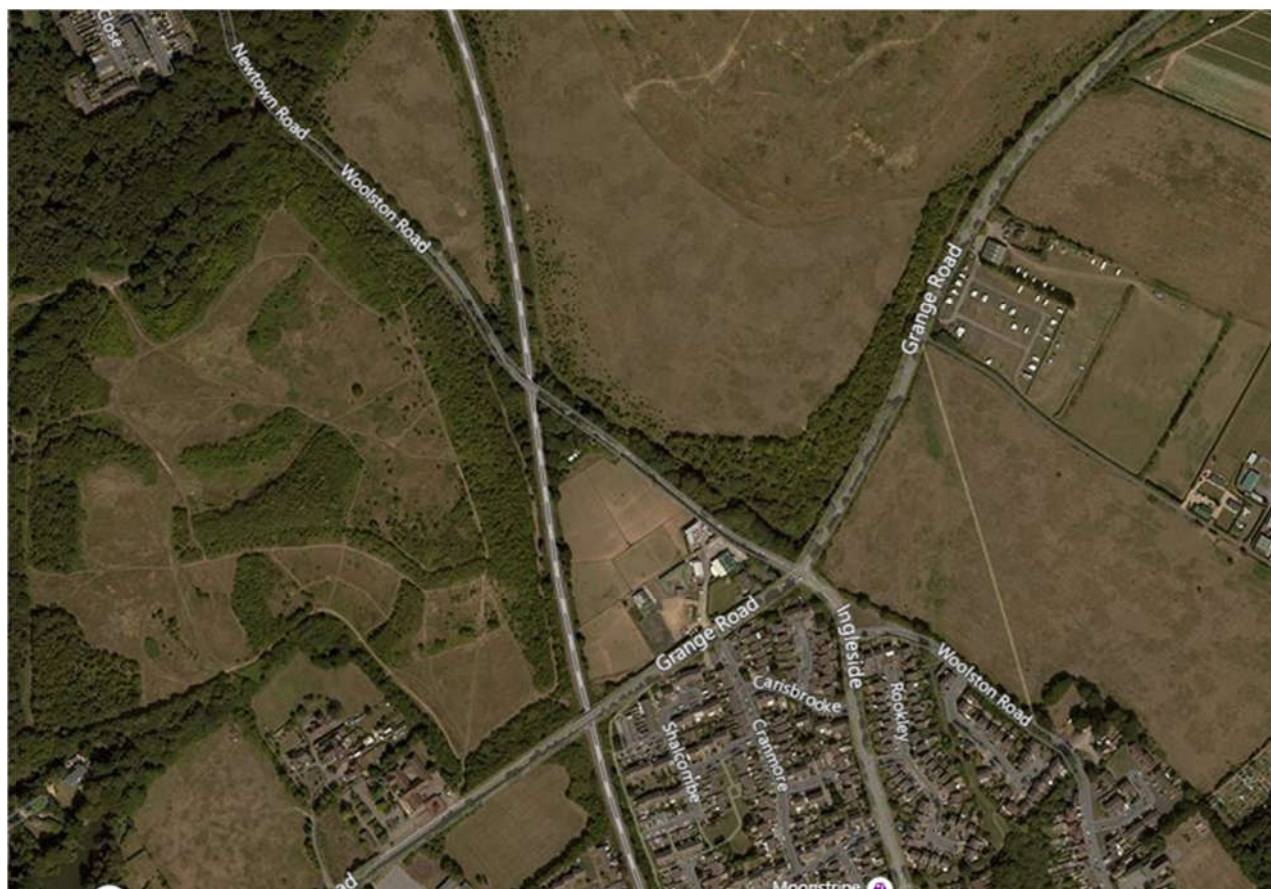


Figure 2 – Aerial Photograph predevelopment

Job Number

18831

Project

Abbey Fruit Farm, Grange Road, Netley, Hampshire
SO31 5FF

Client

Crayfern Homes

Date of Photograph

October 2019

Appendix I – Gas Validation Certification Plots I-50 and 8I-93 Ground Floors

Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Creyfern Homes

Inspection Record

Inspection Dates:	2 ND FEBRUARY 2021	Plot Reference:	SHOWHOME
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The floor is to be raised with suitable insulation materials and underfloor heating to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



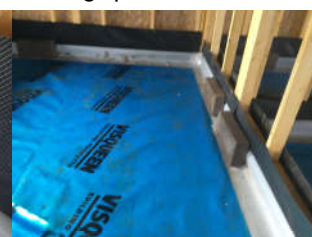
Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	5 TH JUNE 2022 AND 6 TH SEPTEMBER 2022	Plot Reference:	PLOT 2
Inspecting Engineer:	MR C SWAINSTON		

Job Title:	Principal Environmental Engineer	Pass
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Membrane Type:	Visqueen Gas Barrier and Prodetailing Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.
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Inspection Notes

This is a Flat over Garage (FOG) Location and as such only the Ground Floor access requires validation.

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). No drainage has been installed in this location through the membrane (Photograph 3).

The ground floor was raised with suitable insulation materials to the level of the membrane edge and therefore minimized the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

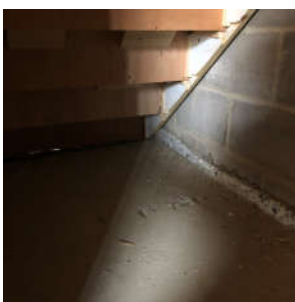
Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	5 TH JUNE 2022 AND 22 ND JUNE 2022	Plot Reference:	PLOT 3
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

This unit has two bay windows.

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The ground floor is to be raised with suitable insulation materials to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	22 ND JUNE 2022	Plot Reference:	PLOT 4
Inspecting Engineer:	MR C SWAINSTON		

Job Title:	Principal Environmental Engineer	Pass
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Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.
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Inspection Notes

This unit has two bay windows.

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The ground floor is to be raised with suitable insulation materials to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	I 883 I
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	I 4 TH JUNE 2022	Plot Reference:	PLOT 5
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

This is one of a combined unit with Plot 6 and has two bay windows..

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The ground floor is to be raised with suitable insulation materials to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	5 TH JUNE 2022 AND 14 TH JUNE 2022	Plot Reference:	PLOT 6
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

This is one of a combined unit with Plot 5 and has two bay windows.

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The ground floor is to be raised with suitable insulation materials to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance and appropriately patched if required during installation (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

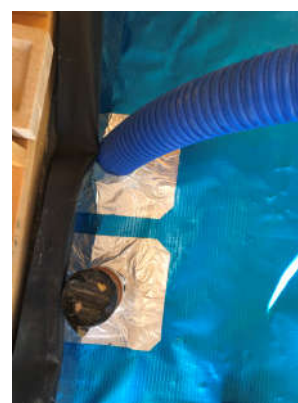
Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	14 TH MARCH 2022	Plot Reference:	PLOT 7
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The floor is to be raised with suitable insulation materials and underfloor heating to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	14 TH MARCH 2022	Plot Reference:	PLOT 8
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

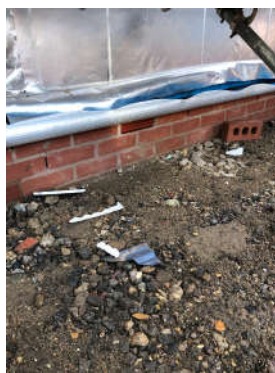
A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The floor is to be raised with suitable insulation materials and underfloor heating to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	1 ST JUNE 2022	Plot Reference:	PLOT 9
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

This is a Flat Over Garage (FOG) Location. This Validation certification therefore only applies to works undertaken at the access point (stairway) to the Flat from the Ground Floor.

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, membrane imperfections or damage have been appropriately covered in a manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The floor is to be raised with suitable insulation materials to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

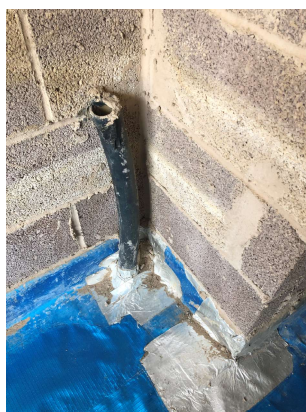
Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	1 ST JUNE 2022	Plot Reference:	PLOT 10
Inspecting Engineer:	MR C SWAINSTON		

Job Title:	Principal Environmental Engineer
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Pass

Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.
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Inspection Notes

This is one of a combined unit with Plot 11.

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The ground floor is to be raised with suitable insulation materials to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	1 ST JUNE 2022	Plot Reference:	PLOT 11
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

This is one of a combined unit with Plot 10.

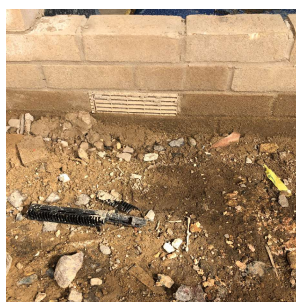
A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The ground floor is to be raised with suitable insulation materials to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	2 ND AND 24 TH MARCH 2021	Plot Reference:	12 AND 13
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The floor is to be raised with suitable insulation materials and underfloor heating to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBEY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	28 TH JANUARY 2022	Plot Reference:	PLOT 14
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailing Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

This is a Flat Over Garage (FOG) Location. This Validation certification therefore only applies to works undertaken at the access point (stairway) to the Flat from the Ground Floor.

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The floor is to be raised with suitable insulation materials to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

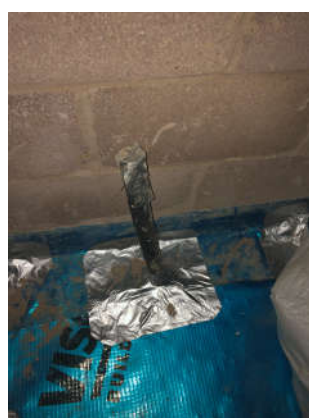
Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	10 TH MAY 2022	Plot Reference:	PLOT 15
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

This is one of a combined unit with Plot 16 and contains two bay windows.

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The ground floor is to be raised with suitable insulation materials to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photographs 2 and 4 – Bay Windows).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBEY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	10 TH MAY 2022	Plot Reference:	PLOT 16
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

This is one of a combined unit with Plot 15

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The ground floor is to be raised with suitable insulation materials to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBEY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	10 TH MAY 2022	Plot Reference:	PLOT 17
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

This is a Flat Over Garage (FOG) Location. This Validation certification therefore only applies to works undertaken at the access point (stairway) to the Flat from the Ground Floor.

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, membrane imperfections or damage have been appropriately covered in a manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The floor is to be raised with suitable insulation materials to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	23 RD FEBRUARY 2022	Plot Reference:	PLOT 18
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The floor is to be raised with suitable insulation materials and underfloor heating to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	23 RD FEBRUARY 2022	Plot Reference:	PLOT 19
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The floor is to be raised with suitable insulation materials and underfloor heating to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	23 RD FEBRUARY 2022	Plot Reference:	PLOT 20
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The floor is to be raised with suitable insulation materials and underfloor heating to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	28 TH JANUARY 2022	Plot Reference:	PLOT 21
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The floor is to be raised with suitable insulation materials and underfloor heating to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	5 TH MAY 2022	Plot Reference:	PLOT 22-24
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

This is a three-storey unit. Plot 22 is the Ground Floor, Plot 23 is the first floor and Plot 24 is the second Floor. Photographs and validation are for the Ground Floor.

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The ground floor is to be raised with suitable insulation materials to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBEY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	5 TH MAY 2022	Plot Reference:	PLOT 25
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailing Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

This is one of a combined unit with Plot 26.

Photograph 1

Photograph 2

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.



This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

Photograph 3

Photograph 4

The ground floor is to be raised with suitable insulation materials to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).



The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	5 TH MAY 2022	Plot Reference:	PLOT 26
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

This is one of a combined unit with Plot 25 but has a bay window.

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

Photograph 1



Photograph 2



This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

Photograph 3



Photograph 4



The ground floor is to be raised with suitable insulation materials to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4 – Bay Window).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	10 TH JANUARY 2022	Plot Reference:	PLOT 27
Inspecting Engineer:	MR C SWAINSTON		

Job Title:	Principal Environmental Engineer	Pass
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Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.
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Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The floor is to be raised with suitable insulation materials and underfloor heating to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	10 TH JANUARY 2022	Plot Reference:	PLOT 28
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The floor is to be raised with suitable insulation materials and underfloor heating to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

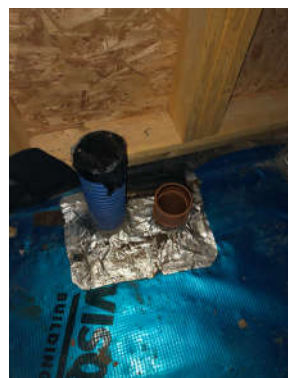
Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	7 TH JANUARY 2022	Plot Reference:	PLOT 29
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

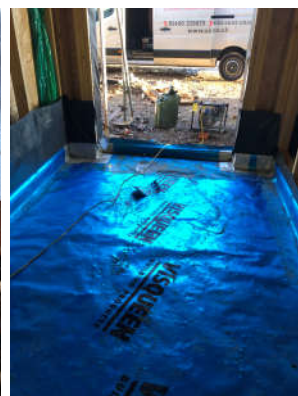
The floor is to be raised with suitable insulation materials and underfloor heating to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

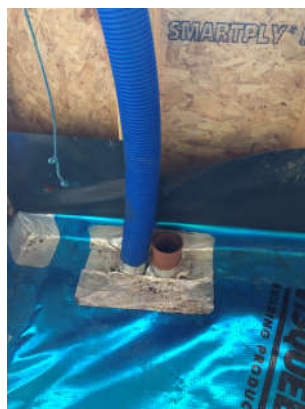
Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	7 TH JANUARY 2022	Plot Reference:	PLOT 30
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The floor is to be raised with suitable insulation materials and underfloor heating to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	7 TH DECEMBER 2021	Plot Reference:	PLOT 31
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The floor is to be raised with suitable insulation materials and underfloor heating to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

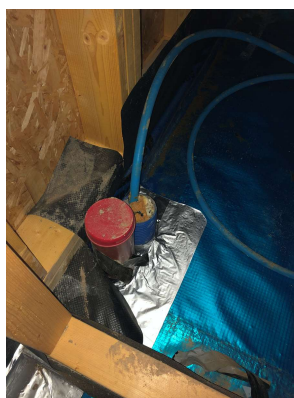
Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	7 TH DECEMBER 2021	Plot Reference:	PLOT 32
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The floor is to be raised with suitable insulation materials and underfloor heating to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	7 TH AND 20 TH DECEMBER 2021	Plot Reference:	PLOT 33
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	PASs	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The floor is to be raised with suitable insulation materials and underfloor heating to the level of the membrane edge and therefore minimize the potential for further damage. Damage or puncture was noted in or around one of the drainage pipe installations which appeared to have been undertaken post installation in a very rough manner invalidating the protection which was made aware to the developer.

This has been rectified as of 20th December 2021 as evidenced in Photograph 4. The works now appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	6 TH DECEMBER 2021	Plot Reference:	PLOT 34
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The floor is to be raised with suitable insulation materials and underfloor heating to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	6 TH DECEMBER 2021	Plot Reference:	PLOT 35
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The floor is to be raised with suitable insulation materials and underfloor heating to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



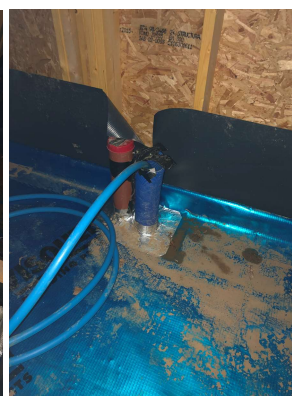
Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	6 TH DECEMBER 2021	Plot Reference:	PLOT 36
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

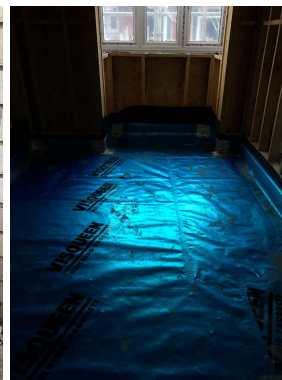
The floor is to be raised with suitable insulation materials and underfloor heating to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	5 TH NOVEMBER 2021	Plot Reference:	PLOT 37
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

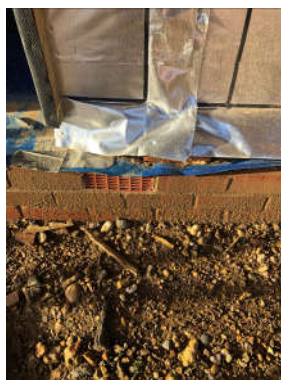
A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The floor is to be raised with suitable insulation materials and underfloor heating to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	5 TH NOVEMBER 2021	Plot Reference:	PLOT 38
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The floor is to be raised with suitable insulation materials and underfloor heating to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	5 TH NOVEMBER 2021	Plot Reference:	PLOT 39
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

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The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	5 TH NOVEMBER 2021	Plot Reference:	PLOT 40
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

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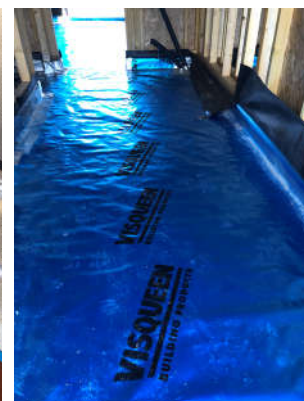
The floor is to be raised with suitable insulation materials and underfloor heating to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	22 ND OCTOBER 2021	Plot Reference:	PLOT 41
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The floor is to be raised with suitable insulation materials and underfloor heating to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

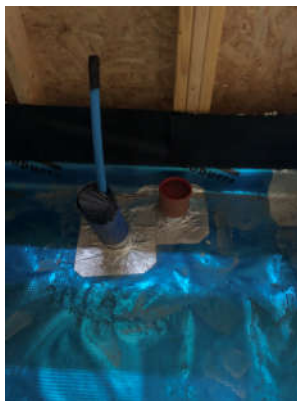
Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	22 ND OCTOBER 2021	Plot Reference:	PLOT 42
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

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The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	16 TH SEPTEMBER 2021	Plot Reference:	PLOT 43
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

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The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	16 TH SEPTEMBER 2021	Plot Reference:	PLOT 44
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

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Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	16 TH SEPTEMBER 2021	Plot Reference:	PLOT 45
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

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The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	16 TH SEPTEMBER 2021	Plot Reference:	PLOT 46
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

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The floor is to be raised with suitable insulation materials and underfloor heating to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

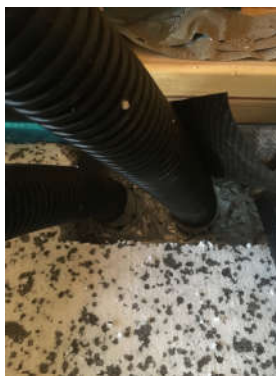
Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	16 TH SEPTEMBER 2021	Plot Reference:	PLOT 47
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

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The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBEY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	1 ST JULY 2021	Plot Reference:	48
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailing Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The floor is to be raised with suitable insulation materials and underfloor heating to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



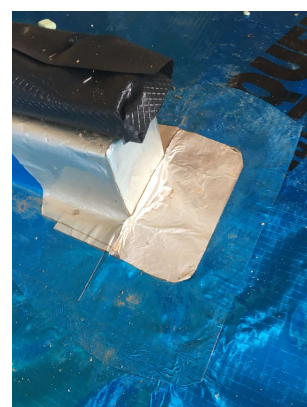
Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBEY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	1 ST JULY 2021	Plot Reference:	49
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

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The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	22 ND JUNE 2021	Plot Reference:	50
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

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Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	1 ST JULY 2021	Plot Reference:	81
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

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The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	1 ST JULY 2021	Plot Reference:	82
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

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The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	14 TH JULY 2021	Plot Reference:	83
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailing Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The floor is to be raised with suitable insulation materials and underfloor heating to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

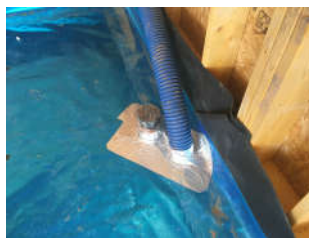
Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	26 TH JULY 2021	Plot Reference:	PLOT 84
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The floor is to be raised with suitable insulation materials and underfloor heating to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	26 TH JULY 2021	Plot Reference:	PLOT 85
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

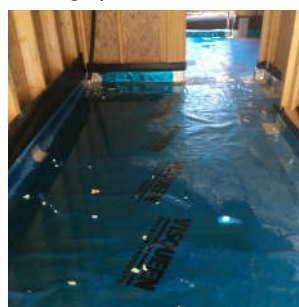
The floor is to be raised with suitable insulation materials and underfloor heating to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



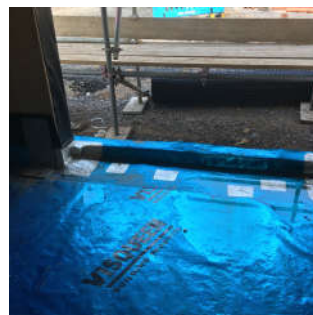
Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBEY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	28 TH JANUARY 2022	Plot Reference:	PLOT 86
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

This is a Flat Over Garage (FOG) Location. This Validation certification therefore only applies to works undertaken at the access point (stairway) to the Flat from the Ground Floor.

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The floor is to be raised with suitable insulation materials to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	25 TH AUGUST 2021	Plot Reference:	PLOT 87
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The floor is to be raised with suitable insulation materials and underfloor heating to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	25 TH AUGUST 2021	Plot Reference:	PLOT 88
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

The floor is to be raised with suitable insulation materials and underfloor heating to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	25 TH AUGUST 2021	Plot Reference:	PLOTS 89-93 FLATS
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

A suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

This has been covered as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2). Where required, drainage has been installed through the membrane in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photograph 3).

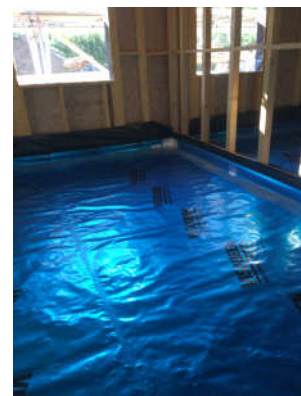
The floor is to be raised with suitable insulation materials and underfloor heating to the level of the membrane edge and therefore minimize the potential for further damage. No damage or puncture was noted in or on the visible membrane and all corners and joints appeared appropriately and suitably emplaced in line with the appropriate guidance (Photograph 4).

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4



Appendix 2. Validation of Initial Installations Plots 4-6

Gas Membrane Validation Certificate



General Details

Job Number:	18831
Job Name:	ABBAY FRUIT FARM
Client:	Crayfern Homes

Inspection Record

Inspection Dates:	5 TH JULY 2022	Plot Reference:	INITIAL PLOTS 4-6
Inspecting Engineer:	MR C SWAINSTON		
Job Title:	Principal Environmental Engineer	Pass	
Membrane Type:	Visqueen Gas Barrier and Prodetailling Strip - Technical Sheets Supplied and appear appropriate and compliant with CS 2 requirements and BS8485 for gas protection. Confirmed on site.		

Inspection Notes

As part of the initial phase of installation suitable membrane has been installed and taped as per recommended guidance and standards and rises from the floor to a level in the outer course of the building above the ventilation course (Photograph 1) and onto any access points at the same level.

Areas of the plots have been installed as agreed at locations of potential ingress and below the levels of the timber frame installation as appropriate and taped in place as required by the manufacturer's guidance and the agreed method statements using hot weld methods to secure the tape and join membranes (Photograph 2 and 3).

Where required, drainage has been installed through the floor and sealed in an appropriate manner consistent with current guidance and appears to be secure and fit for purpose. (Photographs 4). The final installation and incorporation of the floor cover layer is to be undertaken subsequently and validated following completion.

The works appear compliant with provision of precautionary Amber 1 or CS2 levels of gas risk protection and are validated as being suitable and appropriate as such by this inspection, the works to date and the materials used.

Photograph 1



Photograph 2



Photograph 3



Photograph 4

