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GAS MEMBRANE VALIDATION

Site Name: Belle Vue	Project Number: 12-123
Company Name: Countryside Properties	Date: 21-11-2022
Project Manager: S. Ellis	E3P Engineer: P. Lavelle
PM Qualifications: BSc (Hons), FGS, Cenv	Engineer Qualifications: GGS Training Feb 2022
Ground Gas Risk Assessment: Amber 1	
<p>Overview:</p> <p>The membrane comprised a Visqueen low permeability gas membrane (Blue) resistant to radon, carbon dioxide and low levels of methane. E3P can confirm there were no holes or rips at the time of inspection. Upon being laid the membrane is to be covered with a Celotex (closed Cell) floor insulation material which is considered to provide a high degree of protection.</p> <p>All external joints were inspected and E3P can confirm that the membrane was overlapped and double taped to external and internal gas resistant DPM. The membrane was taped to the gas resistant DPM using a double-sided jointing tape. All the overlaps were then additionally taped using foil backed girth tape.</p> <p>Each unit has a service duct located to the front and outer edge of the property. E3P inspected each one and can confirm that the top-hats have been adequately sealed against the membrane.</p> <p>Based on the information provided within this report, the site inspections and validation checklists, E3P can confirm that Plots 171-172 & 189-190 have been installed with gas protection measures in accordance with Amber 1 to an acceptable level of workmanship.</p>	



GAS MEMBRANE VALIDATION

Complete

Score	100%
Site Name	Belle Vue
Location	172–176 Kirkmanshulme Lane, Longsight Manchester England M18 United Kingdom (53.461337122058346, - 2.1856296187751)
Project Manager	Stuart Ellis
Project number	12123
Developer	Countryside
Site representative Signature	Jared 21 Nov 2022 9:26 AM GMT
Conducted on	21 Nov 2022 8:53 AM GMT
Prepared by	Patrick Lavelle



Inspection Gas Membrane - 100%

100%

Plot Inspection - 100%

100%

Plot Inspection 1 - 100%

100%

Plot Number

190

Type of Development: Other add note

House



Photo 1

Gas Characteristic Situation

Amber 1

Foundation Type: Other add note

Suspended Floor

Gas Membrane Type: Manufacturer, gauge, and colour.

Blue visqueen (Building products)

Gas Membrane Condition: Open punctures, tears, rips, stretching, Presence of debris, Repairs, Signs of weakness such as raised or sunken indentations, Protection plan in place to restrict access to gas membrane? IF FAIL DESCRIPTION IN ACTIONS AND PHOTOS REQUIRED

Pass



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6



Photo 7

Laps, welds, and joints seals: Joints lapped and sealed in accordance with manufacturer's requirements/ specification? Minimum overlap insured? Sections taped twice? Are welds complete? Appropriate joining/double-sided tape used, Folds running in line with joints? (no joints cutting across folds)

Pass



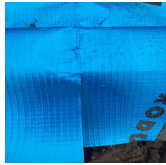


Photo 8



Photo 9



Photo 10



Photo 11



Photo 12

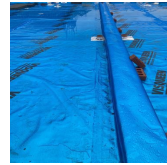


Photo 13

Service entries seals: Top hats seal arrangements fixed around service entries? Use of Jubilee clips?

Yes



Photo 14

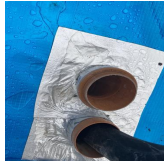


Photo 15



Photo 16



Photo 17

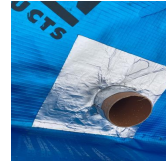


Photo 18



Photo 19



Photo 20



Photo 21



Photo 22

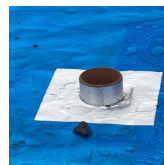


Photo 23

Type of joints/ Lapping

Welded



Photo 24



Photo 25

Corners / Internal joints: Check all corners are correctly formed or contractor has used performed corners.

Pass



Photo 26



Photo 27



Photo 28

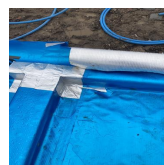


Photo 29



Photo 30



Photo 31

Extent of Coverage: Is the membrane covering the entire plot? Does membrane span over outside walls?

Yes



Photo 32



Photo 33



Photo 34



Condition of sub-grade and underside of gas membrane: Check that the subgrade does not contain rough/uneven surfaces, is appropriately clean and that there are no hard/sharp objects. That protective sand blinding or geotextile (if specified) is present and meets the design criteria.



Photo 35

Pass

Slab / membrane condition (is membrane clear of debris or insulation): Can membrane be fully seen and photographed – ask contractor to remove an debris so membrane can be fully seen an inspected – this is a requirement of NHBC and local authorities.



Photo 36



Photo 37

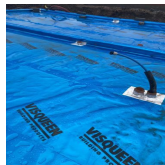


Photo 38



Photo 39



Photo 40



Photo 41

Pass

External Wall Air bricks: Numbers, size. positions as design drawing? (Minimum of 3 walls)

Pass



Plot Inspection 2 - 100%

100%

Plot Number

189

Type of Development: Other add note

House



Photo 42

Gas Characteristic Situation

Amber 1

Foundation Type: Other add note

Suspended Floor

Gas Membrane Type: Manufacturer, gauge, and colour.

Blue visqueen



Photo 43

Gas Membrane Condition: Open punctures, tears, rips, stretching, Presence of debris, Repairs, Signs of weakness such as raised or sunken indentations, Protection plan in place to restrict access to lain gas membrane? IF FAIL DESCRIPTION IN ACTIONS AND PHOTOS REQUIRED

Pass



Photo 44



Photo 45

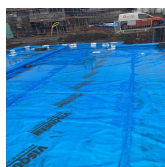


Photo 46



Photo 47

Laps, welds, and joints seals: Joints lapped and sealed in accordance with manufacturer's requirements/ specification? Minimum overlap insured? Sections taped twice? Are welds complete? Appropriate joining/double-sided tape used, Folds running in line with joints? (no joints cutting across folds)

Pass



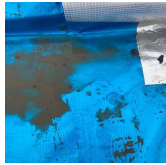


Photo 48

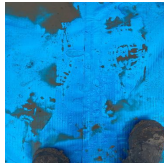


Photo 49

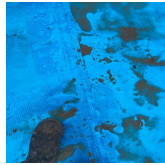


Photo 50



Photo 51

Service entries seals: Top hats seal arrangements fixed around service entries? Use of Jubilee clips?

Yes

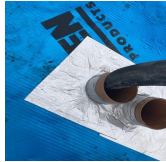


Photo 52

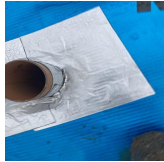


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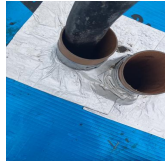


Photo 54



Photo 55

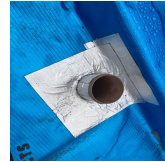


Photo 56

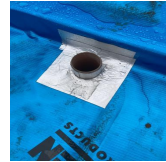


Photo 57



Photo 58



Photo 59



Photo 60

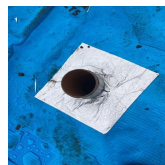


Photo 61

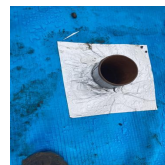


Photo 62

Type of joints/ Lapping

Welded

Corners / Internal joints: Check all corners are correctly formed or contractor has used performed corners.

Pass



Photo 63



Photo 64



Photo 65



Photo 66



Photo 67



Photo 68



Photo 69

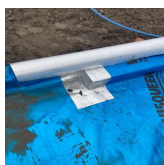


Photo 70

Extent of Coverage: Is the membrane covering the entire plot? Does membrane span over outside walls?

Yes



Photo 71



Photo 72

Photo 73



Condition of sub-grade and underside of gas membrane: Check that the subgrade does not contain rough/uneven surfaces, is appropriately clean and that there are no hard/sharp objects. That protective sand blinding or geotextile (if specified) is present and meets the design criteria.



Photo 74

Pass

Slab / membrane condition (is membrane clear of debris or insulation): Can membrane be fully seen and photographed – ask contractor to remove an debris so membrane can be fully seen an inspected – this is a requirement of NHBC and local authorities.



Photo 75

Photo 76

Photo 77

Pass

External Wall Air bricks: Numbers, size. positions as design drawing? (Minimum of 3 walls)

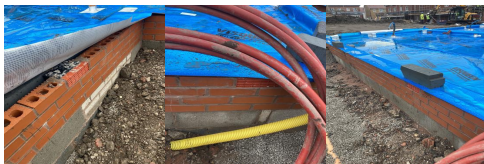


Photo 78

Photo 79

Photo 80

Pass



Plot Inspection 3 - 100%

100%

Plot Number

172

Type of Development: Other add note

House



Photo 81

Gas Characteristic Situation

Amber 1

Foundation Type: Other add note

Suspended Floor

Gas Membrane Type: Manufacturer, gauge, and colour.

Blue visqueen

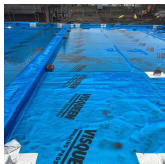


Photo 82

Gas Membrane Condition: Open punctures, tears, rips, stretching, Presence of debris, Repairs, Signs of weakness such as raised or sunken indentations, Protection plan in place to restrict access to lain gas membrane? IF FAIL DESCRIPTION IN ACTIONS AND PHOTOS REQUIRED

Pass



Photo 83

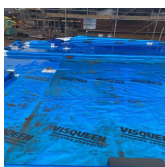


Photo 84



Photo 85



Photo 86

Laps, welds, and joints seals: Joints lapped and sealed in accordance with manufacturer's requirements/ specification? Minimum overlap insured? Sections taped twice? Are welds complete? Appropriate joining/double-sided tape used, Folds running in line with joints? (no joints cutting across folds)

Pass



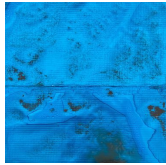


Photo 87



Photo 88

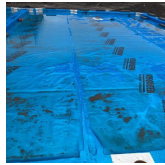


Photo 89

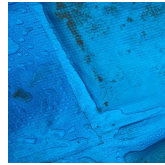


Photo 90



Photo 91

Service entries seals: Top hats seal arrangements fixed around service entries? Use of Jubilee clips?

Yes

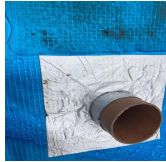


Photo 92

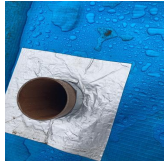


Photo 93

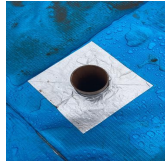


Photo 94

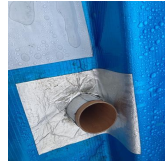


Photo 95

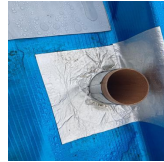


Photo 96

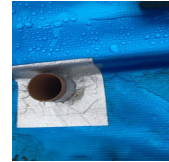


Photo 97

Type of joints/ Lapping

Welded

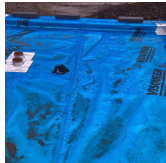


Photo 98



Photo 99

Corners / Internal joints: Check all corners are correctly formed or contractor has used performed corners.

Pass



Photo 100



Photo 101



Photo 102



Photo 103



Photo 104



Photo 105

Extent of Coverage: Is the membrane covering the entire plot? Does membrane span over outside walls?

Yes



Photo 106



Photo 107



Photo 108



Photo 109

Condition of sub-grade and underside of gas membrane: Check that the subgrade does not contain rough/uneven surfaces, is appropriately clean and that there are no hard/sharp objects. That protective sand blinding or geotextile (if specified) is present and meets the design criteria.

Pass





Photo 110

Slab / membrane condition (is membrane clear of debris or insulation): Can membrane be fully seen and photographed – ask contractor to remove an debris so membrane can be fully seen an inspected – this is a requirement of NHBC and local authorities.

Pass

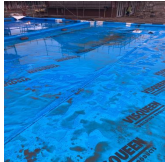


Photo 111

External Wall Air bricks: Numbers, size. positions as design drawing? (Minimum of 3 walls)

Pass



Photo 112

Photo 113

Photo 114



Plot Inspection 4 - 100%

100%

Plot Number

171

Type of Development: Other add note

House



Photo 115

Gas Characteristic Situation

Amber 1

Foundation Type: Other add note

Suspended Floor

Gas Membrane Type: Manufacturer, gauge, and colour.

Blue visqueen



Photo 116

Gas Membrane Condition: Open punctures, tears, rips, stretching, Presence of debris, Repairs, Signs of weakness such as raised or sunken indentations, Protection plan in place to restrict access to lain gas membrane? IF FAIL DESCRIPTION IN ACTIONS AND PHOTOS REQUIRED

Pass

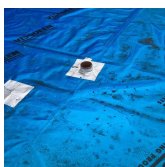


Photo 117

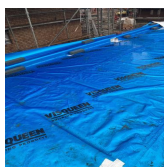


Photo 118



Photo 119

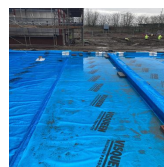


Photo 120

Laps, welds, and joints seals: Joints lapped and sealed in accordance with manufacturer's requirements/ specification? Minimum overlap insured? Sections taped twice? Are welds complete? Appropriate joining/double-sided tape used, Folds running in line with joints? (no joints cutting across folds)

Pass



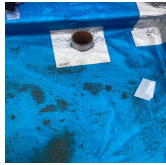


Photo 121



Photo 122

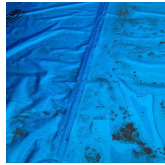


Photo 123



Photo 124



Photo 125



Photo 126

Service entries seals: Top hats seal arrangements fixed around service entries? Use of Jubilee clips?

Yes

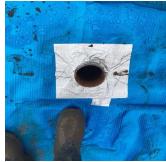


Photo 127

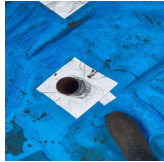


Photo 128



Photo 129



Photo 130

Type of joints/ Lapping

Taped



Photo 131



Photo 132



Photo 133



Photo 134

Corners / Internal joints: Check all corners are correctly formed or contractor has used performed corners.

Pass



Photo 135



Photo 136



Photo 137



Photo 138

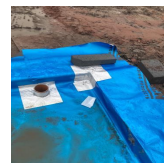


Photo 139



Photo 140



Photo 141

Extent of Coverage: Is the membrane covering the entire plot? Does membrane span over outside walls?

Yes



Photo 142

Photo 143

Photo 144



Condition of sub-grade and underside of gas membrane: Check that the subgrade does not contain rough/uneven surfaces, is appropriately clean and that there are no hard/sharp objects. That protective sand blinding or geotextile (if specified) is present and meets the design criteria.



Photo 145

Pass

Slab / membrane condition (is membrane clear of debris or insulation): Can membrane be fully seen and photographed – ask contractor to remove an debris so membrane can be fully seen an inspected – this is a requirement of NHBC and local authorities.



Photo 146

Photo 147

Photo 148

Pass

External Wall Air bricks: Numbers, size. positions as design drawing? (Minimum of 3 walls)



Photo 149

Photo 150

Photo 151

Pass

Passive Venting

Sub-floor Void: Is a check possible on future plots (insert Plot number or NO in text box)

NO



Appendix



Photo 1



Photo 2



Photo 3



Photo 4





Photo 5



Photo 6



Photo 7



Photo 8



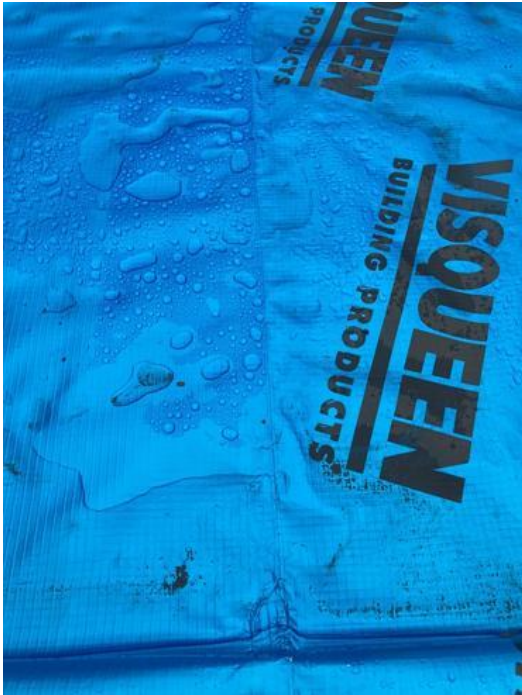


Photo 9



Photo 10



Photo 11



Photo 12





Photo 13



Photo 14



Photo 15



Photo 16





Photo 17

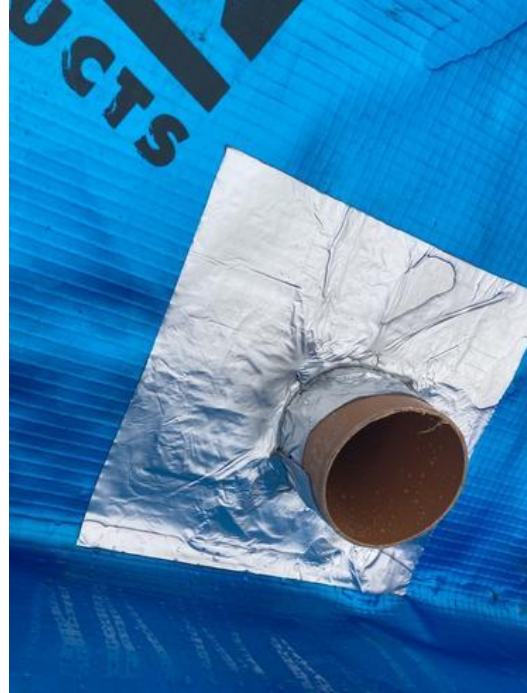


Photo 18



Photo 19



Photo 20





Photo 21



Photo 22

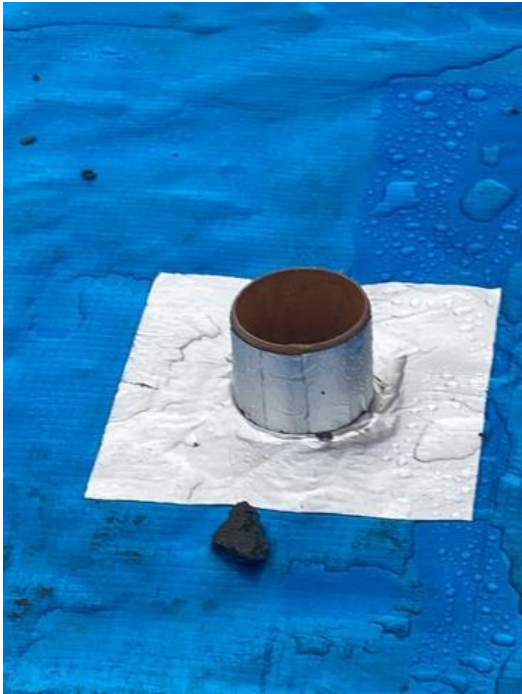


Photo 23



Photo 24





Photo 25



Photo 26



Photo 27



Photo 28





Photo 29



Photo 30



Photo 31



Photo 32





Photo 33



Photo 34



Photo 35



Photo 36





Photo 37



Photo 38



Photo 39



Photo 40





Photo 41



Photo 42



Photo 43



Photo 44





Photo 45



Photo 46



Photo 47

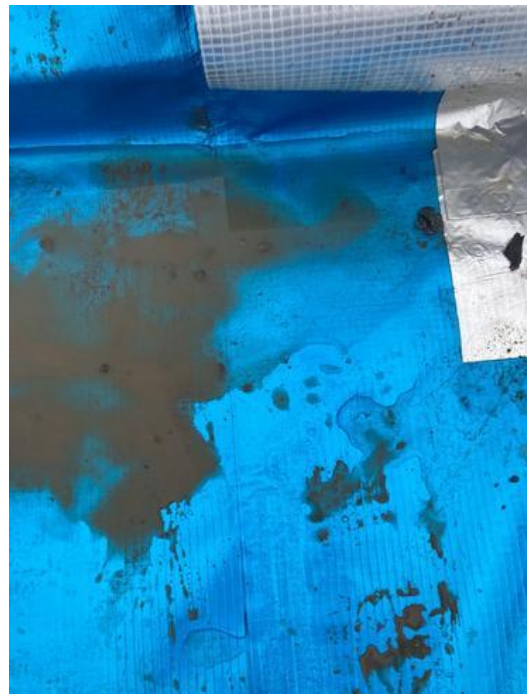


Photo 48





Photo 49



Photo 50



Photo 51



Photo 52





Photo 53



Photo 54



Photo 55

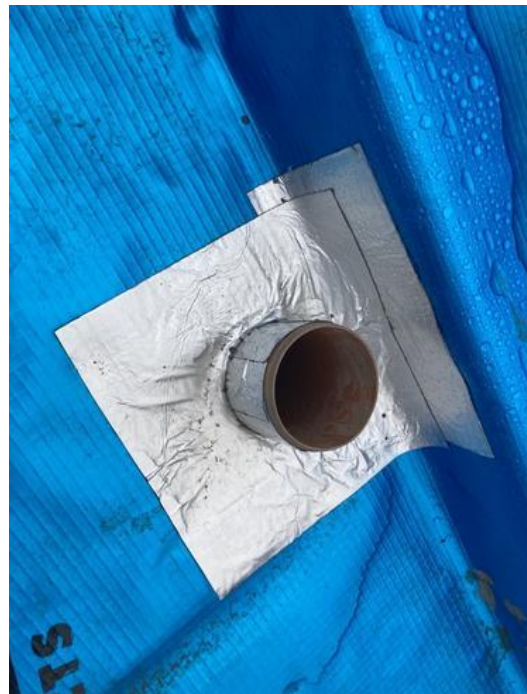


Photo 56



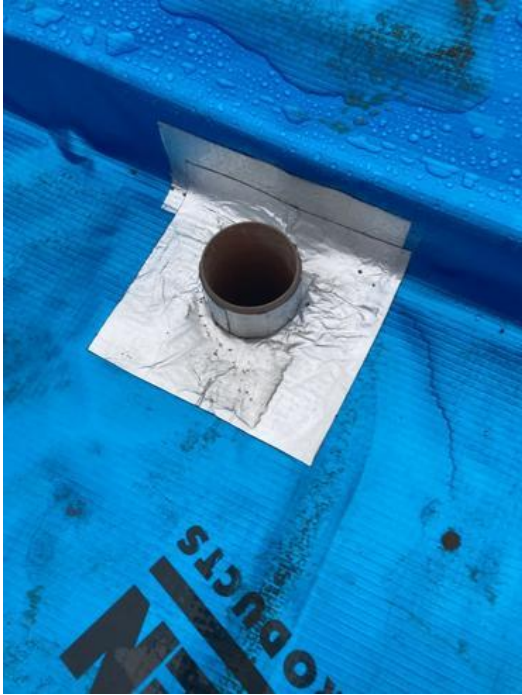


Photo 57



Photo 58



Photo 59



Photo 60



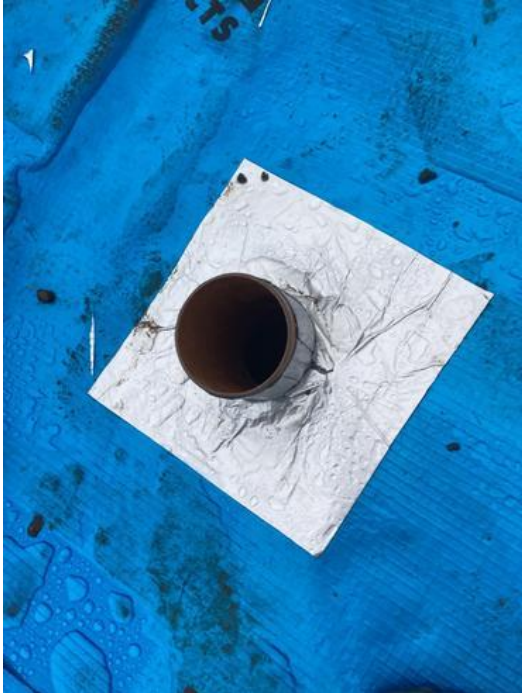


Photo 61

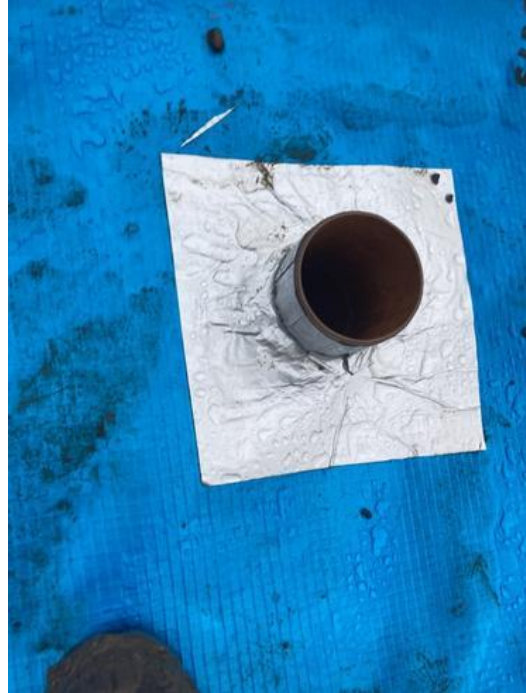


Photo 62



Photo 63



Photo 64





Photo 65



Photo 66



Photo 67



Photo 68





Photo 69



Photo 70



Photo 71



Photo 72





Photo 73



Photo 74



Photo 75



Photo 76





Photo 77



Photo 78



Photo 79



Photo 80





Photo 81



Photo 82



Photo 83

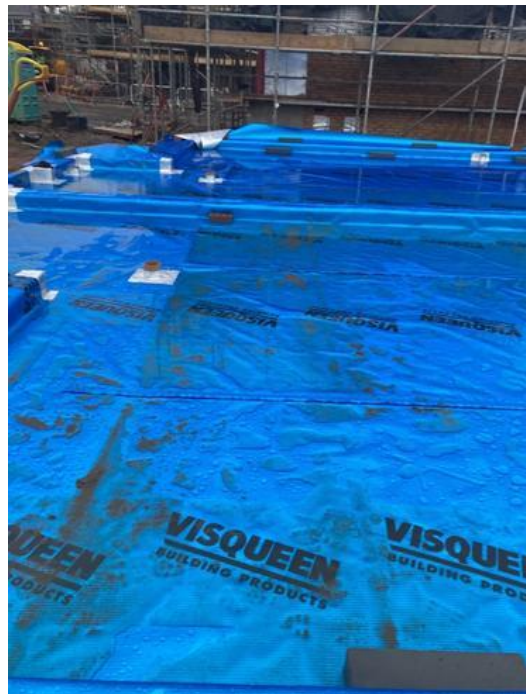


Photo 84





Photo 85



Photo 86

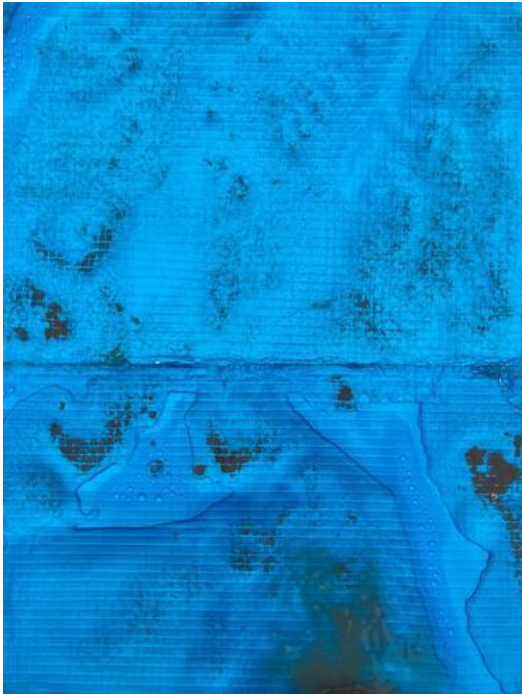


Photo 87



Photo 88





Photo 89

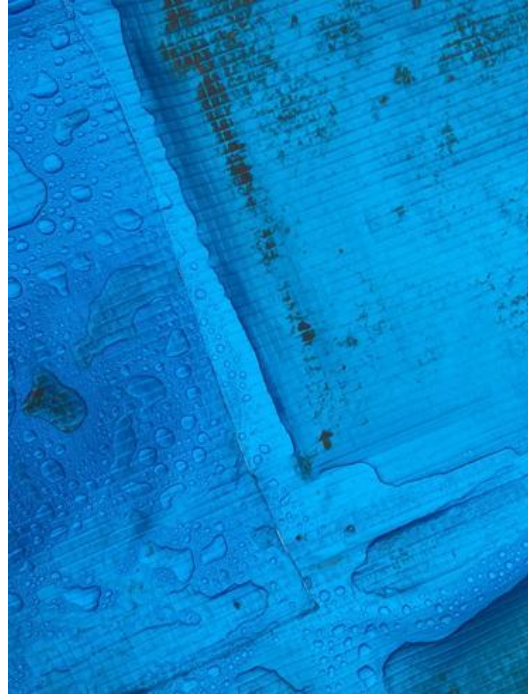


Photo 90



Photo 91

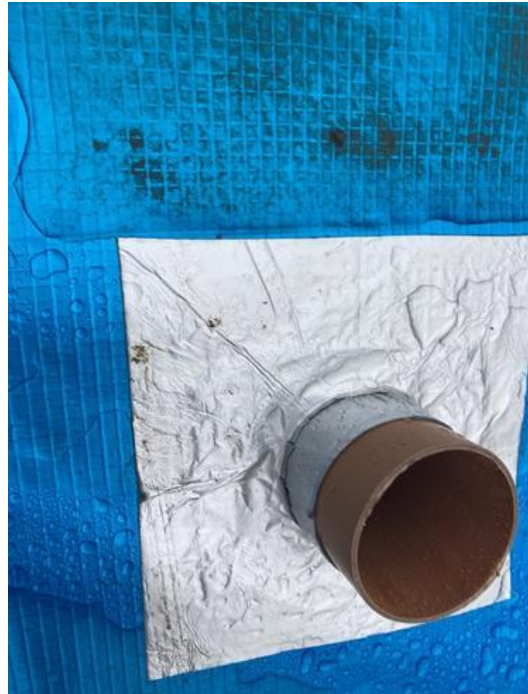


Photo 92



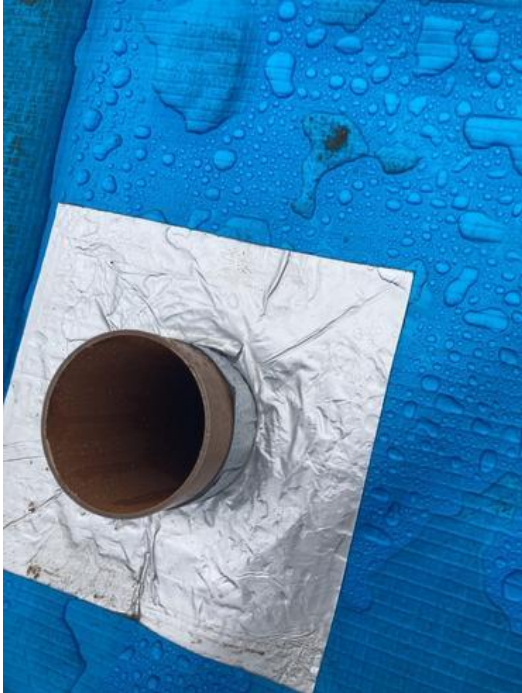


Photo 93

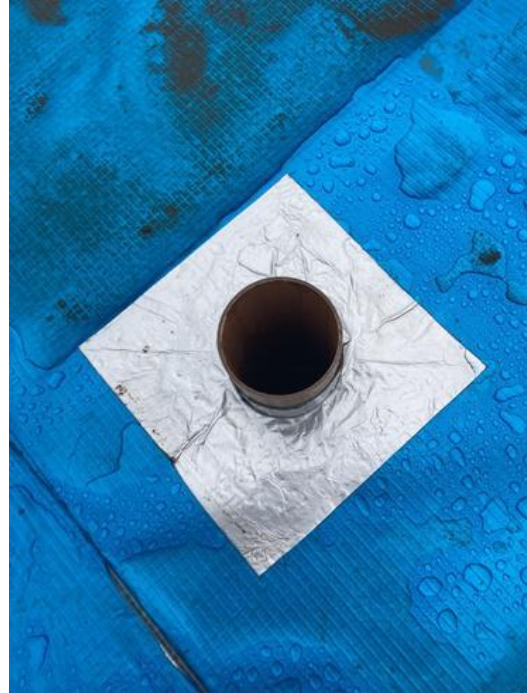


Photo 94



Photo 95



Photo 96



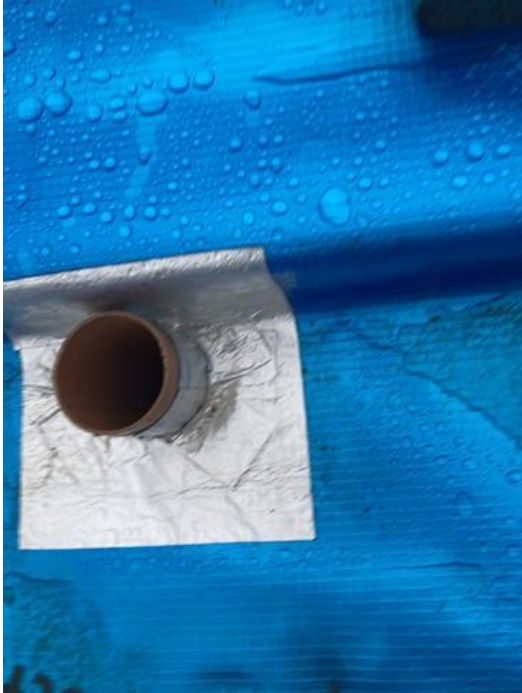


Photo 97

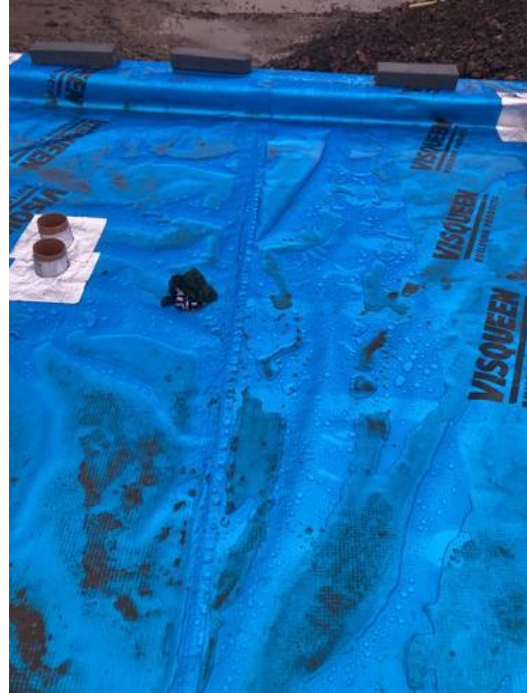


Photo 98



Photo 99



Photo 100





Photo 101



Photo 102



Photo 103



Photo 104





Photo 105



Photo 106



Photo 107



Photo 108





Photo 109



Photo 110



Photo 111



Photo 112





Photo 113



Photo 114



Photo 115



Photo 116





Photo 117



Photo 118



Photo 119



Photo 120





Photo 121



Photo 122



Photo 123



Photo 124





Photo 125



Photo 126

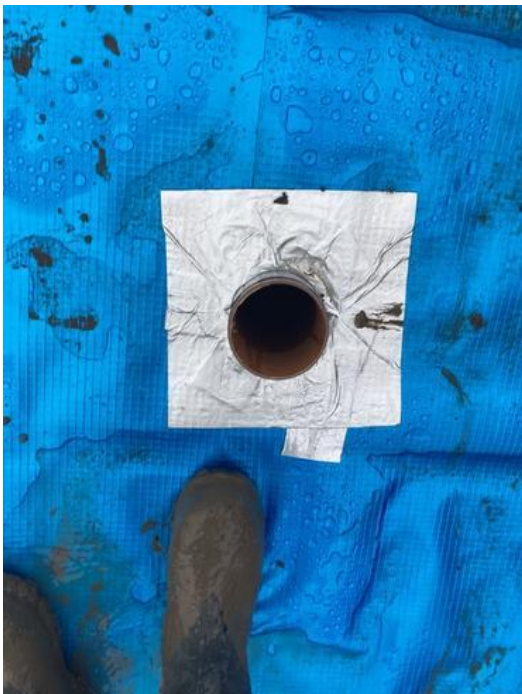


Photo 127



Photo 128





Photo 129



Photo 130



Photo 131



Photo 132





Photo 133



Photo 134



Photo 135



Photo 136





Photo 137

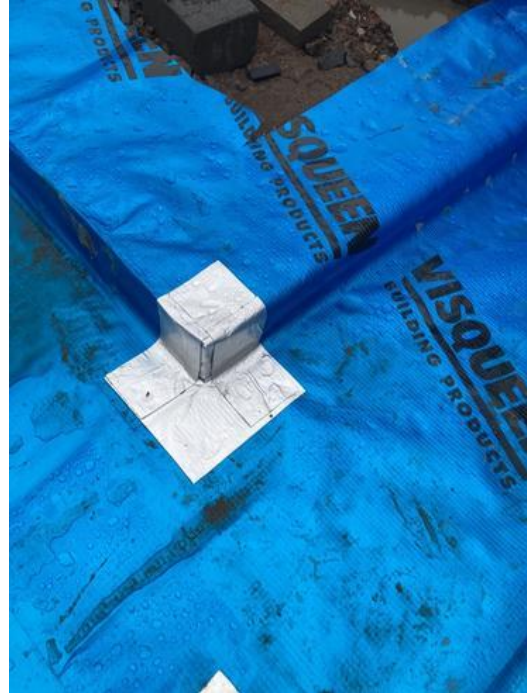


Photo 138

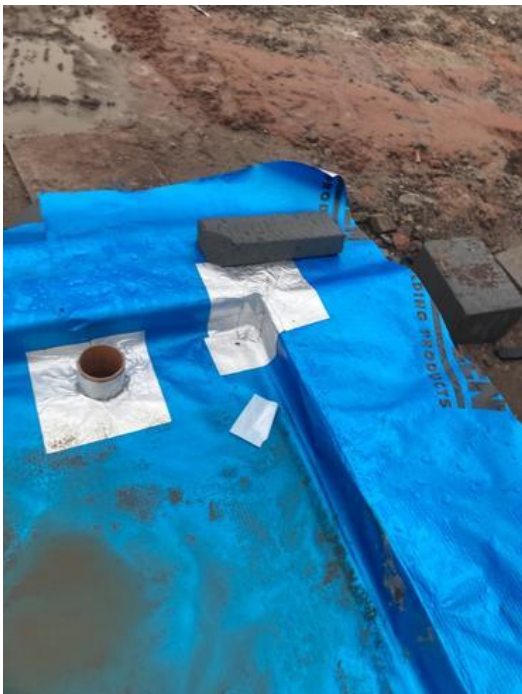


Photo 139



Photo 140





Photo 141



Photo 142



Photo 143



Photo 144





Photo 145



Photo 146



Photo 147



Photo 148





Photo 149



Photo 150



Photo 151

