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GAS MEMBRANE VALIDATION

Site Name: Belle Vue	Project Number: 12-123
Company Name: Countryside Properties	Date: 04-11-2022
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 (Yellow) resistant to radon, carbon dioxide and low levels of methane. E3P can confirm there were no holes or rips at the time of inspection. Upon being laid the membrane is to be covered with a Celotex (closed Cell) floor insulation material which is considered to provide a high degree of protection.</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 167,178-180 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	180–184 Kirkmanshulme Lane, Longsight Manchester England M18 United Kingdom (53.46105895910061, - 2.184512105953868)
Project Manager	Stuart Ellis
Project number	12-123
Developer	Countryside
Site representative Signature	Paul Lewis 4 Nov 2022 9:03 AM GMT
Conducted on	4 Nov 2022 8:37 AM GMT
Prepared by	Patrick Lavelle



Inspection Gas Membrane - 100%

100%

Plot Inspection - 100%

100%

Plot Inspection 1 - 100%

100%

Plot Number

167

Type of Development: Other add note

House



Photo 1

Gas Characteristic Situation

CS2

Foundation Type: Other add note

Suspended Floor

Gas Membrane Type: Manufacturer, gauge, and colour.

Yellow visqueen



Photo 2

Photo 3

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 4



Photo 5



Photo 6

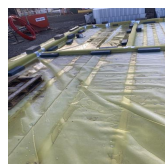


Photo 7

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



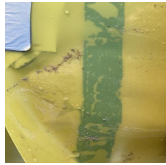


Photo 8



Photo 9

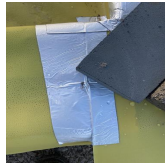


Photo 10

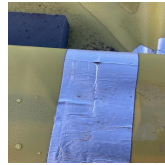


Photo 11

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

Yes



Photo 12



Photo 13

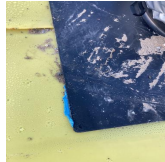


Photo 14



Photo 15



Photo 16



Photo 17



Photo 18



Photo 19



Photo 20



Photo 21



Photo 22



Photo 23

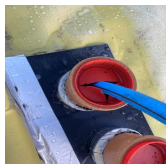


Photo 24



Photo 25

Type of joints/ Lapping

Taped

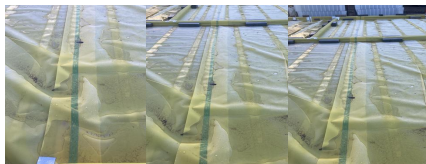


Photo 26

Photo 27

Photo 28

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

Pass



Photo 29



Photo 30



Photo 31



Photo 32



Photo 33

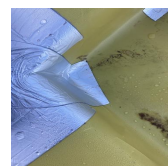


Photo 34





Photo 35

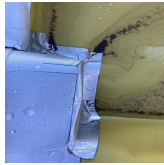


Photo 36



Photo 37



Photo 38

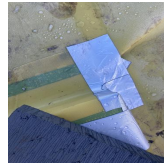


Photo 39

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

Yes



Photo 40

Photo 41

Photo 42

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

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 43



Photo 44



Photo 45



Photo 46



Plot Inspection 2 - 100%

100%

Plot Number

178

Type of Development: Other add note

House



Photo 47

Photo 48

Gas Characteristic Situation

CS2

Foundation Type: Other add note

Suspended Floor

Gas Membrane Type: Manufacturer, gauge, and colour.

Yellow visqueen

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

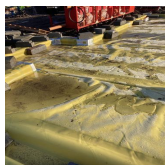


Photo 49



Photo 50

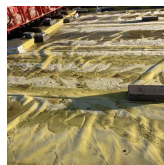


Photo 51



Photo 52

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

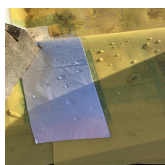


Photo 53



Photo 54



Photo 55



Photo 56



Photo 57

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

Yes





Photo 58



Photo 59



Photo 60



Photo 61



Photo 62



Photo 63



Photo 64

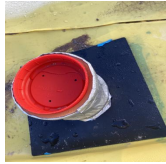


Photo 65



Photo 66



Photo 67



Photo 68



Photo 69

Type of joints/ Lapping

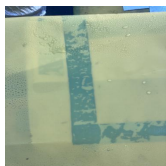


Photo 70



Photo 71



Photo 72



Photo 73



Photo 74

Taped

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

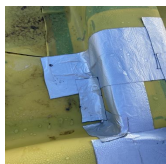


Photo 75



Photo 76



Photo 77

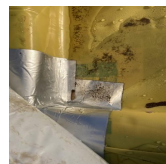


Photo 78

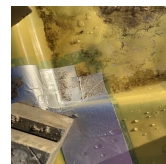


Photo 79



Photo 80

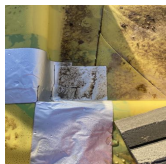


Photo 81



Photo 82

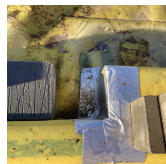


Photo 83



Photo 84

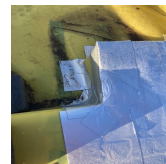


Photo 85

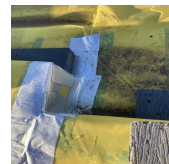


Photo 86



Photo 87



Photo 88

Pass

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

Yes





Photo 89



Photo 90



Photo 91



Photo 92

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

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

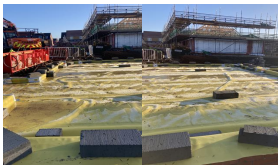


Photo 93

Photo 94



Plot Inspection 3 - 100%

100%

Plot Number

180



Photo 95

Type of Development: Other add note

House



Photo 96

Photo 97

Photo 98

Gas Characteristic Situation

CS2

Foundation Type: Other add note

Suspended Floor

Gas Membrane Type: Manufacturer, gauge, and colour.

Yellow visqueen

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 99

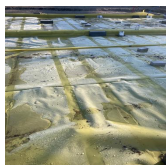


Photo 100

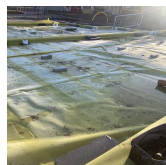


Photo 101

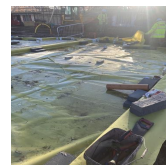


Photo 102

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 103



Photo 104



Photo 105



Photo 106



Photo 107



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

Yes

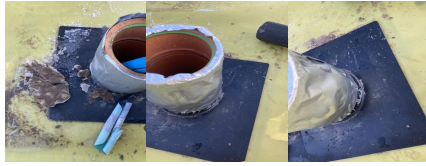


Photo 108

Photo 109

Photo 110

Type of joints/ Lapping

Taped

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

Pass



Photo 111



Photo 112



Photo 113

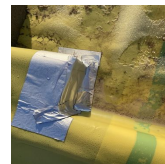


Photo 114



Photo 115

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

Yes



Photo 116

Photo 117

Photo 118

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 119

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



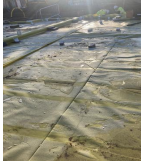


Photo 120



Plot Inspection 4 - 100%

100%

Plot Number

179

Type of Development: Other add note

House



Photo 121

Gas Characteristic Situation

CS2

Foundation Type: Other add note

Suspended Floor

Gas Membrane Type: Manufacturer, gauge, and colour.

Yellow visqueen

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 122

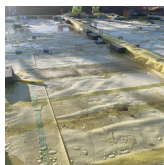


Photo 123



Photo 124

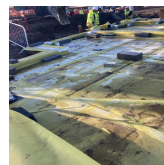


Photo 125

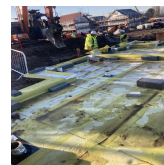


Photo 126

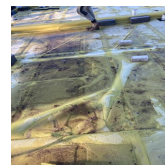


Photo 127

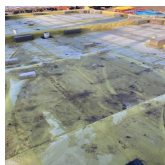


Photo 128

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

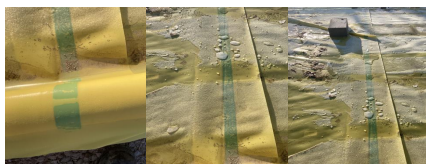


Photo 129

Photo 130

Photo 131



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

Yes



Photo 132



Photo 133



Photo 134

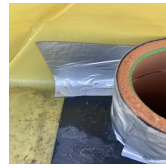


Photo 135

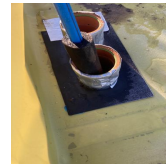


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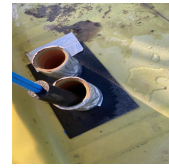


Photo 137

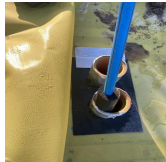


Photo 138



Photo 139



Photo 140

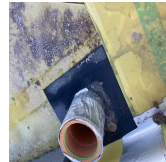


Photo 141



Photo 142

Type of joints/ Lapping

Taped



Photo 143



Photo 144

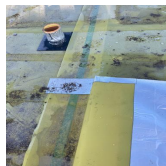


Photo 145

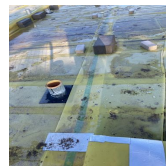


Photo 146



Photo 147

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

Pass



Photo 148



Photo 149



Photo 150



Photo 151



Photo 152



Photo 153

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

Yes



Photo 154



Photo 155

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 156

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

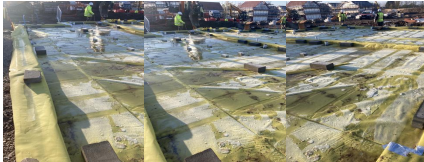


Photo 157

Photo 158

Photo 159

Passive Venting

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

NO

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

Pass



Photo 160



Photo 161



Photo 162



Photo 163



Appendix



Photo 1

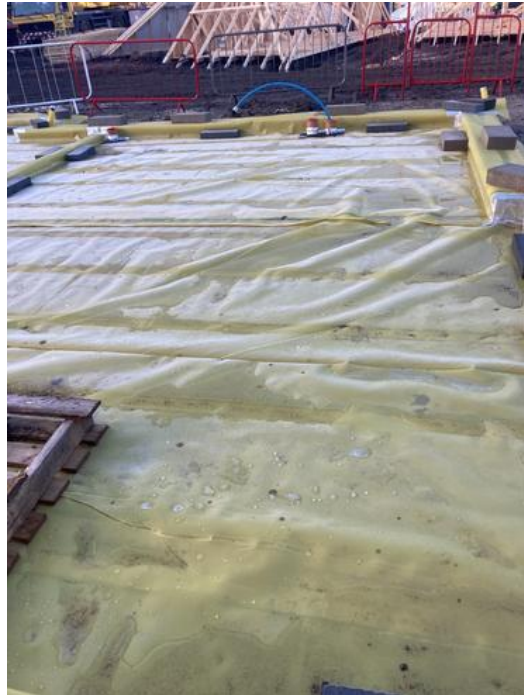


Photo 2



Photo 3



Photo 4





Photo 5



Photo 6



Photo 7

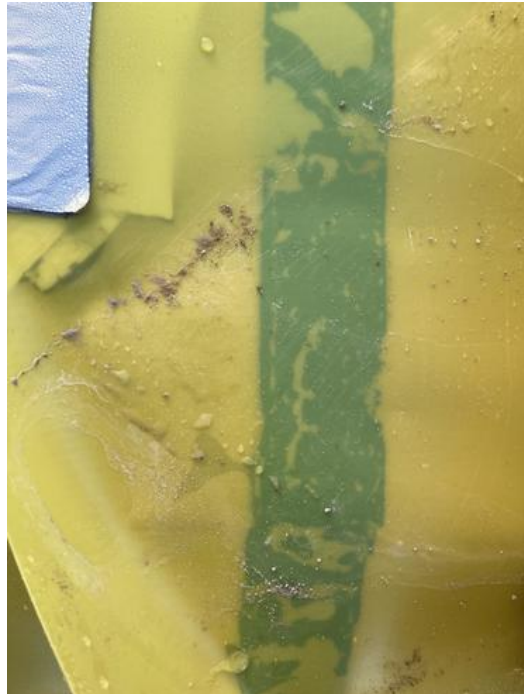


Photo 8





Photo 9



Photo 10

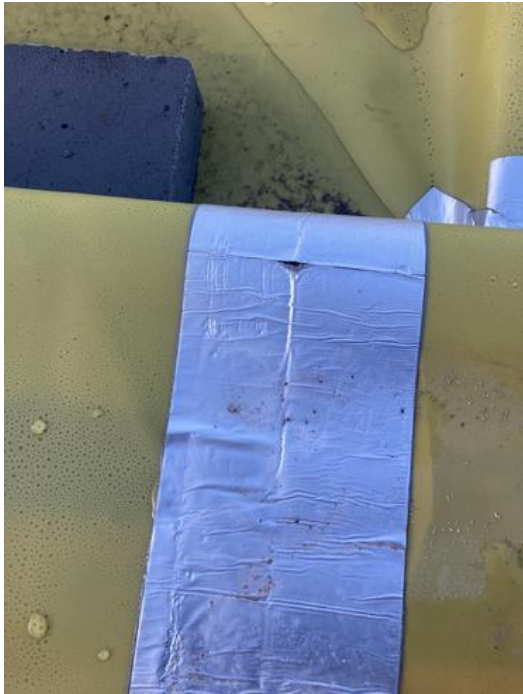


Photo 11



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

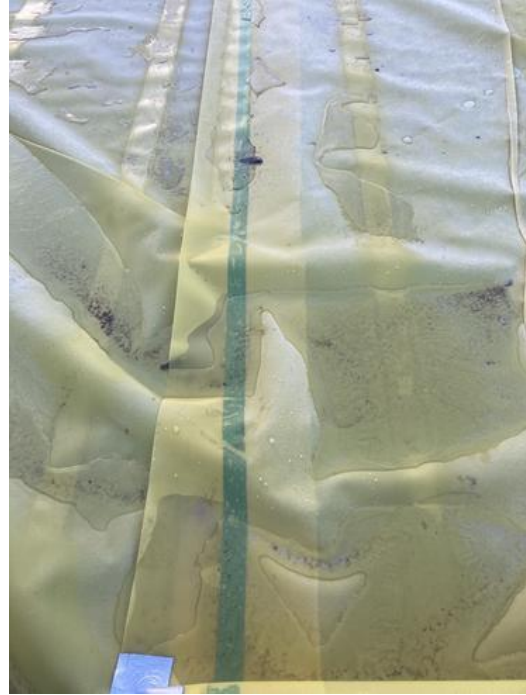


Photo 26



Photo 27



Photo 28





Photo 29



Photo 30



Photo 31



Photo 32





Photo 33



Photo 34



Photo 35



Photo 36





Photo 37



Photo 38

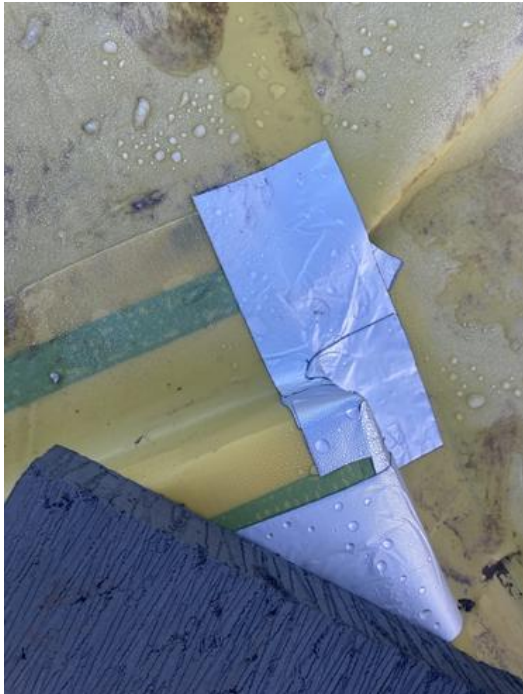


Photo 39



Photo 40





Photo 41



Photo 42



Photo 43



Photo 44





Photo 45



Photo 46



Photo 47

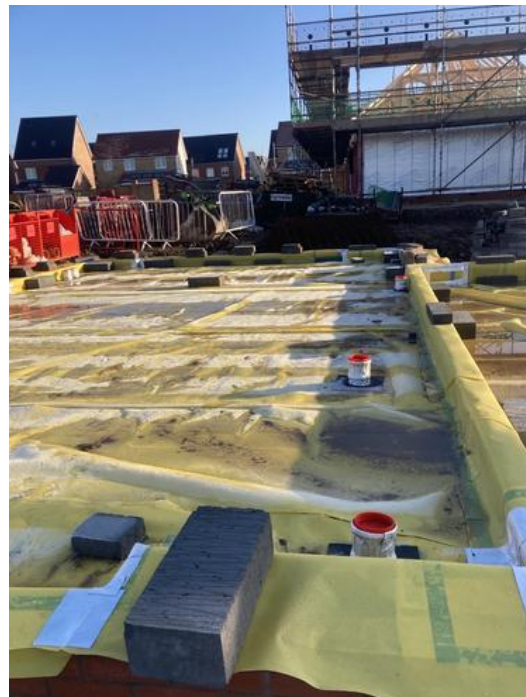


Photo 48



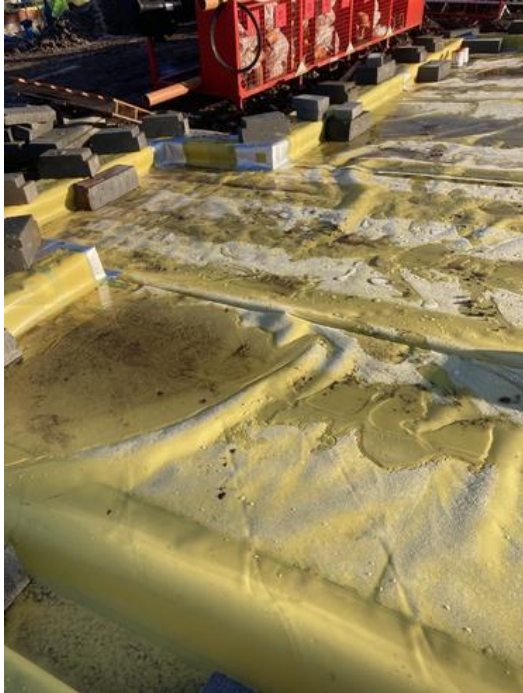


Photo 49



Photo 50

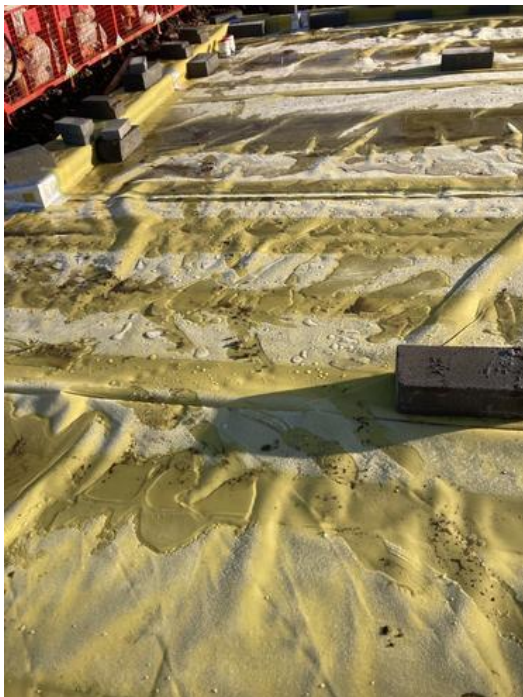


Photo 51

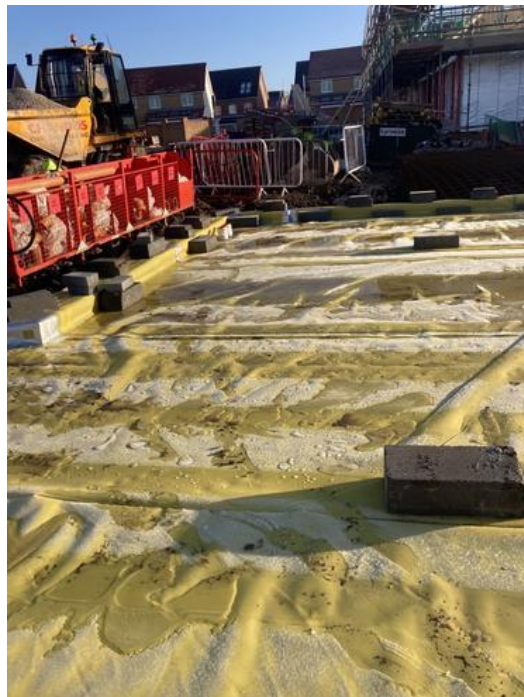


Photo 52



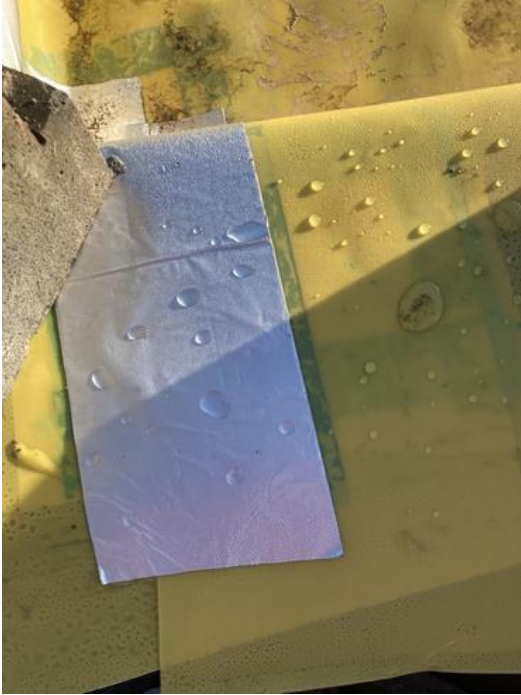


Photo 53



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

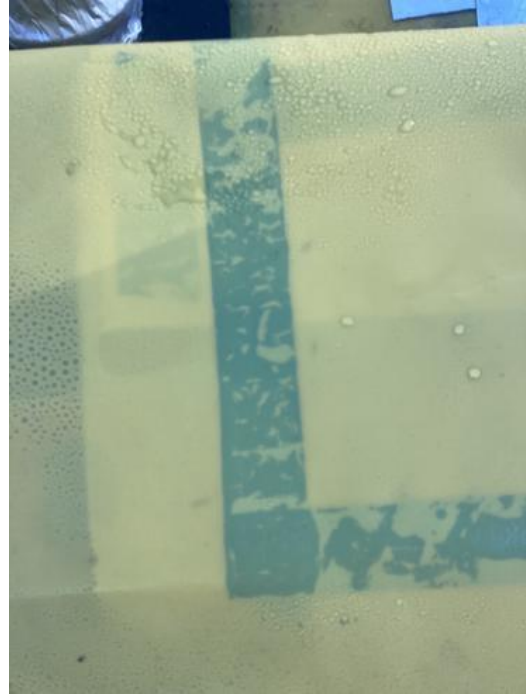


Photo 70



Photo 71



Photo 72





Photo 73



Photo 74



Photo 75



Photo 76



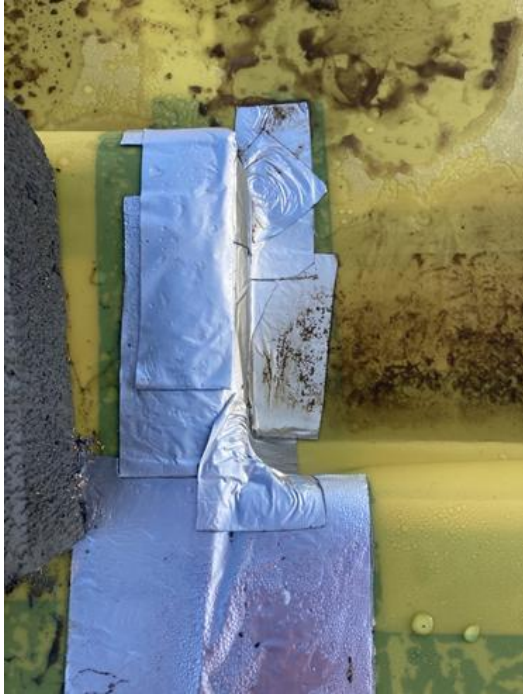


Photo 77



Photo 78

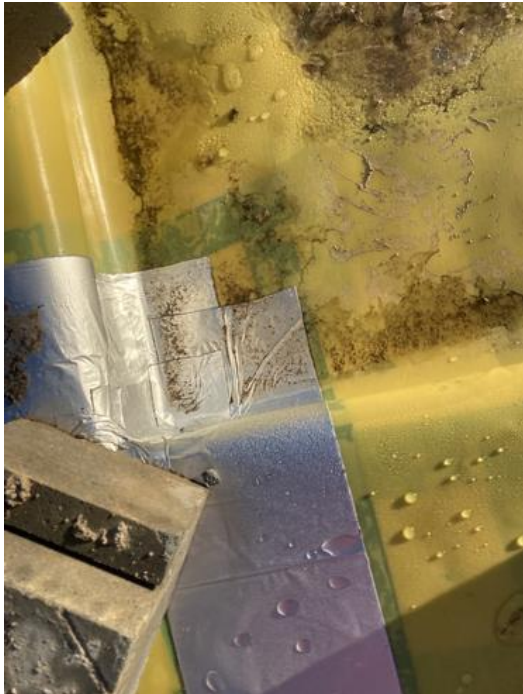


Photo 79



Photo 80





Photo 81



Photo 82



Photo 83



Photo 84





Photo 85

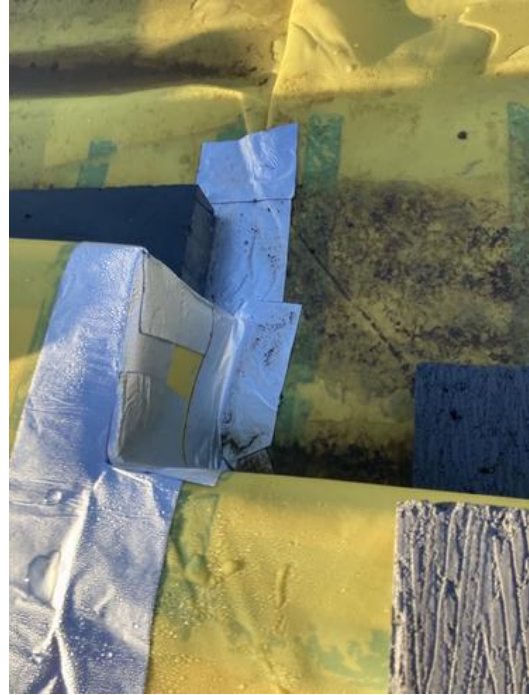


Photo 86

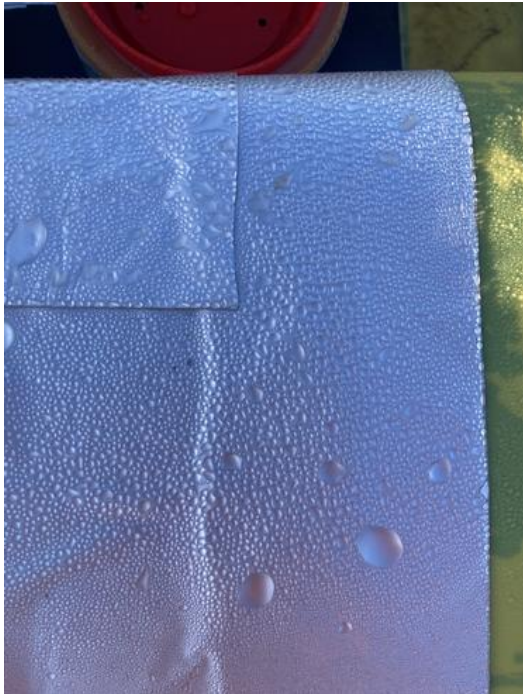


Photo 87



Photo 88





Photo 89



Photo 90



Photo 91



Photo 92





Photo 93



Photo 94



Photo 95



Photo 96





Photo 97



Photo 98



Photo 99

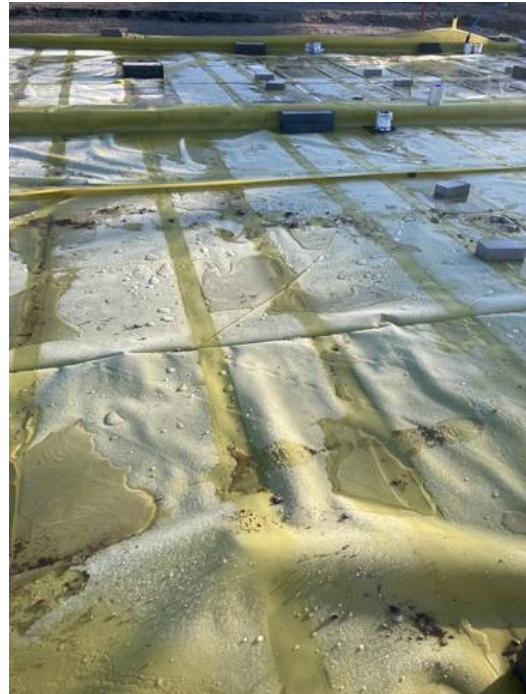


Photo 100





Photo 101



Photo 102



Photo 103



Photo 104





Photo 105



Photo 106



Photo 107



Photo 108





Photo 109



Photo 110



Photo 111



Photo 112



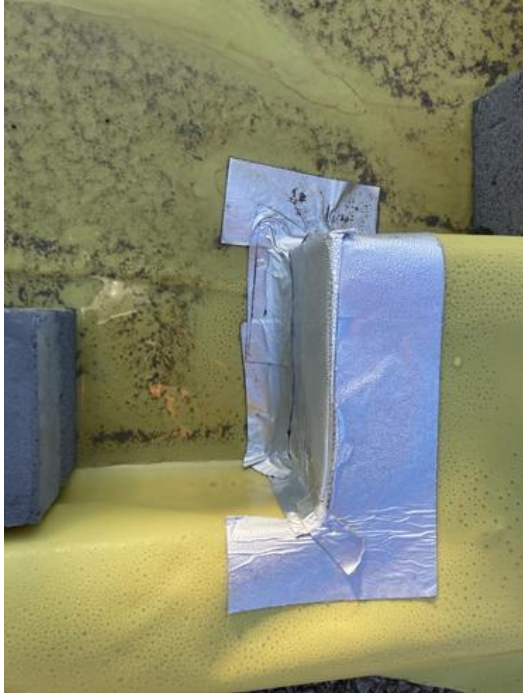


Photo 113



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



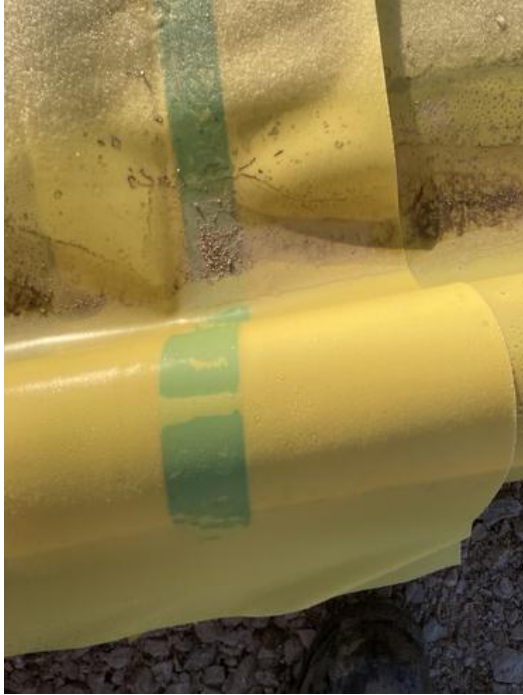


Photo 129



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



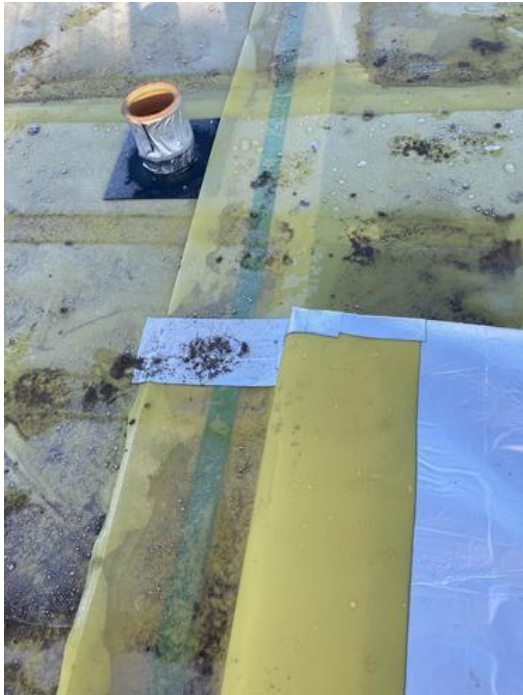


Photo 145

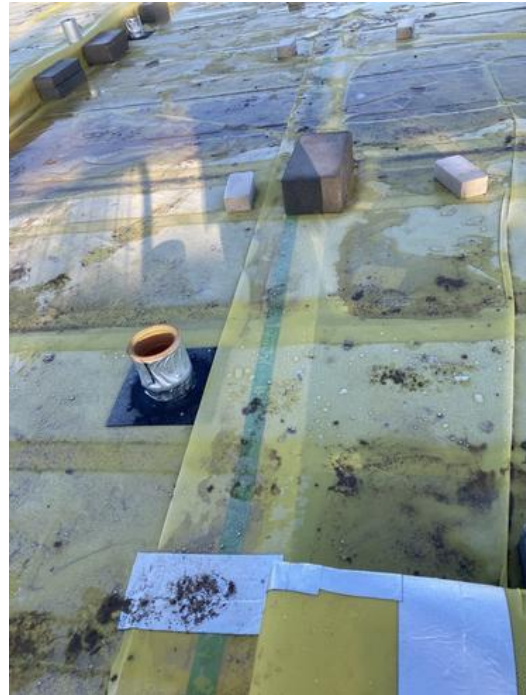


Photo 146



Photo 147



Photo 148





Photo 149



Photo 150



Photo 151



Photo 152





Photo 153



Photo 154



Photo 155



Photo 156





Photo 157



Photo 158



Photo 159



Photo 160





Photo 161



Photo 162



Photo 163

