Visual Inspection of Gas Protection Measures

Marsland Technical Services

Site Name: Hotel, Irish World Heritage Centre, Manchester	Gas Characteristic Situation: 2
Job Number:	Type of development and building/block checked: ~~*Residential*~~*/Commercial/*~~*Other*~~
Date: 17 April 2019	Building Description: New Hotel
Visit by: Bryan Woodcock	Foundation Type: *Suspended Floor/*~~*Raft/Other*~~
Weather at time of inspection: Sunny and clear.	Gas Protection Type: *Passive*~~*/Active*~~

No.	Item	Comments (see notes)
1.	Gas Membrane	
1.1	Condition of sub-grade and underside of gas membrane	The sub base was a well swept block and beam floor and to specification. Although there was evident a small amount of pitting to the underside of the gas barrier there was no noticeable detriment to the gas barrier
1.2	Gas membrane type	Multigas 300 gas barrier. Polyethylene encapsulated aluminium with reinforcing scrim.SA waterproofing barrier to lift pit – to receive gas lining layer
1.3	Gas membrane condition	In all areas the membrane was in good condition, efficiently installed with no visible holes or damage
1.4	Joining tape product	All the loose lay horizontal gas barrier was heat bonded/welded and bonded to all penetrations
1.5	Lapping design	All to data sheet and manufacturers specifications and instructions
1.6	Laps, welds and joints seals	As above
1.7	Service entries seals	Formed on site and as above
2.	Passive Venting	
2.1	Sub-floor void	N / A
2.2	External wall airbricks	N / A
2.3	Internal sleeper walls	N / A
2.4	External vent trenches/ducts	N / A
3.	Active Venting – not applicable	

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The gas protection measures inspected:	a. Are acceptable and comply with the specification
	b. ~~Are acceptable but attention is drawn to issues related to item no. #~~
	c. ~~Are not acceptable due to the issues related to item no. #~~

3.1	System Details	N / A
Additional notes:		

Photographs	
No.	Description
	As Attached

Name: Bryan Woodcock

Signature: Bryan Woodcock

Date: 26 April 2019

Notes: Inspection checklist		
1.1	Underside of gas membrane	Check that the sub grade 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
1.2	Gas membrane type	Manufacturer and product specification, gauge, colour, brand/name, material batch/roll numbers, storage arrangements (protected from dirt/damage?)
1.3	Gas membrane condition	Open punctures, tears, rips, stretching? Excessive footprints/evidence of traffic? Presence of debris? Repairs? Signs of weakness such as raised or sunken indentations? Protection plan in place to restrict access to lain gas membrane?
1.4	Joining tape product	Product type, brand, thickness, material, width, colour? Use of double sided tape?
1.5	Lapping design	Joints lapped and sealed in accordance with manufacturer's requirements/specification? Minimum overlap ensured? Sections taped twice?
1.6	Laps and joints sealed	Welds complete? Appropriate joining/double sided tape used?
1.7	Service entries sealed	Top hats seal arrangements fixed around service entries? Use of Jubilee clips?
2.1	Sub-floor void	Is a check possible? Void former? Gravel (type/specification)? Height of void space? Is it clear?
2.2	External wall airbricks	Number, size, positions as design drawing?
2.3	Internal sleeper walls	Ventilation hols (honeycomb brickwork/pipe crossings?) – Size, spacing, location in accordance with design?
2.4	External vent trenches/ducts	Located and constructed in accordance with design drawings? If open-topped gravel – gravel type/presence of fines? If pipe or other vent, check position and construction for functionality and absence of blockages. Ability of void former to withstand bearing of the superstructure?