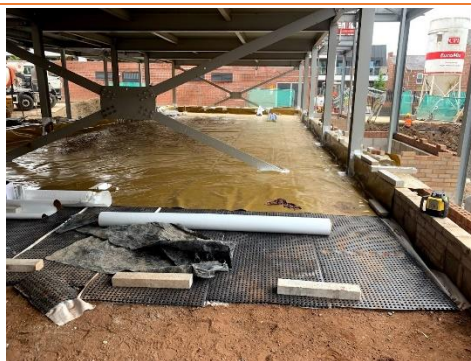
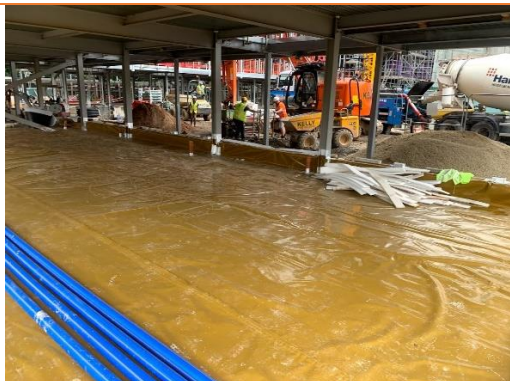


GAS MEMBRANE VALIDATION

Site: Bowes Street – Happi Block South	
Date: 24-08-2021	Project Number: 11-813
Project Manager: R. Horseman	E3P Engineer: J. Newall
Ground Gas Risk Assessment: Hydrocarbon Resistant Membrane (VOC Blok and Visqueen GX)	
Overview: The membrane comprised of Visqueen Ultimate VOC Bloc, this was laid below the slab with welded joints, laid over Visqueen Vent Membrane & vented to external air at 3.0m centres DPC Visqueen GX with taped joints. Visqueen Ultimate VOC Bloc and Visqueen GX is resistant to Hydrocarbons, Methane, VOCs and BTEX and carbon dioxide. E3P can confirm there were no holes or rips at the time of inspection. Upon being laid the membrane is to be covered with a Celotex (closed Cell) floor insulation material which is considered to provide a high degree of protection. All external joints were inspected and E3P can confirm that the membrane was overlapped and double taped to external and internal gas resistant DPM. The membrane was taped to the gas resistant DPM using a double-sided jointing tape. All the overlaps were then additionally taped using foil backed girth tape. Each unit has a service duct located to the front and outer edge of the property. E3P inspected each one and can confirm that the top hats have been adequately sealed against the membrane. Based on the information provided within this report, the site inspections and validation checklists, E3P can confirm that Happi Block South has been installed with gas protection measures in accordance with Characteristic Situation 2 / Amber 1 to an acceptable level of workmanship.	
Membrane Specification: Hydrocarbon Resistant Membrane (VOC Blok and Visqueen GX)	

Happy Block South

General Condition of Membrane-Good Condition



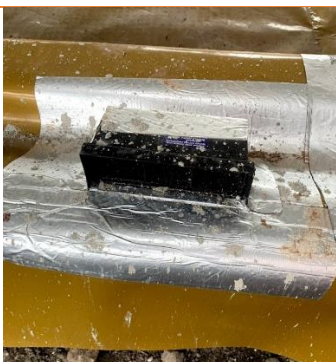
Verification of Joints and Seals-Good Condition



Verification of Service Penetrations-Good Condition



Verification of ventilation – Good Condition





Gas Protection Validation Site Record

Bowes Street

Inspection date/time:	24/08/21	Inspected by:	J. Newall	Photographed:	✓/x
Type of development:		Plot number:	happi Building 1st floor	Developer:	

Notes/recommendations	Comments
Membrane Type	gold membrane
Extent of Coverage	Full coverage
Underside of Membrane	clear
Slab / membrane condition (is membrane clear of debris or insulation)	clear
Type of joints	☒ Tape Joint ☒ Welded Joint ☐ Other (please state)
Service entries – Jubilee clips, Top hats installed correctly	yes
External Wall Air bricks Present?	yes
Corners inspected?	yes
Membrane joints inspected has Double –sided butyl tape been used?	yes
Folds in membrane inspected?	yes
Has the membrane been installed as per the design detail drawing?	yes

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

Inspected by: J. Newall Signed: [Signature]