

Radon Measures – Precautionary Specifications

A combined waterproofing and radon control strategy is proposed for the basement, comprising the installation of a Newton 508R cavity drain membrane system together with provision for a Newton Prestige Air Positive Air Curtain (PAC) system.

The 508R cavity drain membrane will manage groundwater ingress in accordance with best practice, while also forming part of the overall approach to controlling ground gas, including radon. The PAC system will be installed to allow for the introduction of positive pressure ventilation if required.

Following completion of the works, UKHSA-approved 90-day radon monitoring will be undertaken to establish radon levels within the basement environment. Should the monitoring results indicate radon concentrations at or above the UK domestic Action Level of 200 Bq/m³, the PAC system will be commissioned to create a positive air curtain, thereby reducing radon ingress and maintaining safe internal air quality.

If radon levels are identified between the Target Level of 100 Bq/m³ and the Action Level of 200 Bq/m³, consideration will be given to activating the system as a precautionary measure. Alternatively, where radon levels are confirmed to be below 100 Bq/m³, the system will remain installed but inactive, with no further mitigation measures required.

This approach provides a proportionate, risk-based solution aligned with current UKHSA guidance, ensuring both effective waterproofing and a robust mechanism for radon control where necessary.