

POST-OCCUPANCY EVALUATION GUIDANCE

This guidance note sets out how Post-Occupancy Evaluation (POE) should be undertaken and is derived from published guidance and best practice.

1. Post-Occupancy Evaluation (POE) is the method of obtaining feedback on a building's energy performance 'in use', to ensure it measures up to the commitments made by the team that designed and built it. It offers significant potential to address the performance gap and occupant satisfaction.
2. Where a monitoring regime to ensure the 'as designed' building performance targets are achieved in practice for all new and refurbished buildings is required, it is important that data is collected robustly, following good practice POE principles. It is therefore recommended that for residential development the POE methodology in section 11.4 of the Home Quality Mark ONE: Technical Manual: England, Scotland & Wales SD239 (2018)⁵⁸, or as updated, is used as a guide for meeting this requirement. For non-residential buildings the BSRIA Soft Landings and Design for Performance framework (BG 76/2019), or as updated, may be used.
3. Applicants are required to set out in their Energy Statement how their monitoring regime, based on the HQM, BSRIA or similar methodology, will work in practice and be independently verified by a third party. The Energy Statement to be submitted with the planning application.
4. As each new or refurbished building comes into use, the developer must ensure performance monitoring and data collection for all relevant parameters for one whole year is carried out once the building is substantially occupied, in line with good POE practice for residential or non-residential uses. This verification process should entail, after appropriate commissioning has taken place, comparison of the 'as designed' parameters (energy, carbon, air quality and overheating risk) to monitoring data under the same categories, to assess and compare actual performance.
5. In order to account for seasonality, a minimum of 12 months monitoring data is required. On the other hand, to account for actual weather, the modelling results can be adjusted with degree days for the relevant year. A 'performance gap metric', which will compare designed and actual performance (e.g. a percentage difference) for each of the 4 required parameters (energy, carbon, air quality and overheating risk) should be issued at POE stage. This needs to be issued for both the 'central' scenario and the 'lowest acceptable performance /reasonable worst-case scenario' as a minimum, with multiple scenarios considered if at all possible. The process and reporting methodology used for the POE will need to be repeatable, so that performance can be monitored for at least 2 annual space heating cycles.
6. A report will then be required to be submitted to both building owners/occupiers and to Council, which states the performance gap metric and identifies any reasons for deviation from predicted energy usage, carbon emissions, indoor air quality and overheating performance, as well as recommendations for reasonable corrective action that will be taken to reduce or eliminate the performance gap.
7. The submission of the monitoring report to owners/occupiers and the council must be secured by planning condition, to be determined at the time of application based on case-specific factors. The applicant must demonstrate that the reasonable corrective actions committed to in the monitoring report, and subsequently agreed by Buckinghamshire Council, have been implemented through another annual heat cycle before the condition will be discharged.