

Energy Statement

Site Address: 90 Brixham Crescent, Ruislip, HA4 8TX

1. Introduction

This Energy Statement has been prepared in support of the proposed residential alterations and extensions at **90 Brixham Crescent, Ruislip, HA4 8TX**. The proposal comprises a front extension with a sloping roof, a single-storey side extension and a 2.8m rear extension with a flat roof. The proposed works will provide an enlarged kitchen/dining area, utility and WC facilities and an outbuilding with office, while the existing first-floor accommodation will remain unchanged. The proposed drawings show the new extensions and roof forms, with the external finishes indicated to match the existing dwelling.

2. Energy Efficiency

The proposed extensions will be designed and constructed in accordance with the relevant requirements of the Building Regulations, including the energy-efficiency requirements applicable to extensions to existing dwellings. The new building fabric will incorporate appropriate levels of insulation to the external walls, roofs and floors to reduce heat loss and improve the thermal performance of the new accommodation. New windows and external doors will be specified with suitable thermal performance, while construction junctions will be carefully detailed to minimise thermal bridging. The new elements will also be constructed to provide reasonable levels of air tightness, helping to reduce uncontrolled heat loss and improve the overall energy efficiency of the extension.

3. Heating and Lighting

The existing heating system will be retained where appropriate and, where new heating components are required to serve the extended accommodation, these will be selected to provide efficient operation and appropriate control.

Energy-efficient LED lighting will be used within the new extensions, with suitable switching and controls to allow lighting to be turned off when spaces are not in use. The proposed roof areas, including the flat roof elements, will be constructed with appropriate insulation to minimise heat loss through the roof structure.

4. Natural Daylight and Solar Gain

The proposed windows and rooflights will provide good levels of natural daylight to the new accommodation, helping to reduce reliance on artificial lighting during daylight hours. The glazing will be specified to provide an appropriate balance between thermal performance, natural daylight and solar gain. The design will seek to make beneficial use of passive solar gains during colder periods while avoiding excessive solar gain and overheating during warmer periods.

5. Sustainable Construction

The proposed extension will use durable construction materials that are suitable for the existing property and the proposed works. The external appearance will generally match the existing dwelling, as indicated on the proposed elevations, while the new construction will incorporate improved thermal performance in accordance with current Building Regulations requirements. Construction materials will be responsibly managed during the works, with waste minimised wherever practicable and suitable materials reused or recycled where possible. The use of durable materials will also help reduce the need for premature repair or replacement and the associated consumption of resources.

6. Water Efficiency

Water efficiency will also be considered as part of the detailed construction and fit-out of the extension. The proposed ground-floor arrangement includes new WC and utility, and water-efficient sanitary fittings and appliances will be considered to reduce unnecessary water consumption.

7. Conclusion

The proposed development represents a modest extension to an existing residential property and provides an opportunity to incorporate improved energy-efficiency measures within the new construction. The proposed works will incorporate appropriate insulation, energy-efficient windows and doors, efficient lighting and suitable construction detailing to reduce heat loss and energy consumption. The new extension will be designed to comply with the applicable Building Regulations, with the final construction build-ups, insulation specifications and U-values to be confirmed at Building Regulations stage. Overall, the proposal seeks to provide a comfortable and energy-efficient extension while minimising unnecessary energy consumption and ensuring that the new works integrate appropriately with the existing dwelling.