

Sustainability and Energy Statement

11 Spinney Hill, Market Bosworth, CV13 0NU

Planning Portal Ref: PP-14160433

Proposal: Double-storey side extension, single-storey front and rear extensions

Prepared in accordance with Policy CC05 of the Hinckley & Bosworth Local Plan

This proposal relates to a domestic extension to the existing dwelling at 11 Spinney Hill, Market Bosworth, and has been designed to meet high standards of energy efficiency and environmental performance in line with Policy CC05.

1. Energy Efficiency of Fabric and Construction

- **External Walls** will exceed Building Regulations minimum standards with a U-value of $0.17 \text{ W/m}^2\text{K}$. The wall construction includes:
 - 150 mm cavity with 100 mm partial fill “Recticel Eurowall Cavity” insulation
 - Dense concrete blockwork inner leaf and insulated drylining (Gyproc Wallboard + skim)
- **Ground Floor Slabs** will achieve a U-value of **better than $0.11 \text{ W/m}^2\text{K}$** , comprising:
 - 150 mm Kingspan Kooltherm K103 overslab insulation with full DPM integration
 - 100 mm concrete slab on well-compacted hardcore
- **Roof Construction** will achieve a U-value of **better than $0.14 \text{ W/m}^2\text{K}$** , including:
 - 100 mm Kingspan K7 between rafters and 82.5 mm K18 insulation board to underside
 - Kingspan Nilvent breather membrane with ventilated roof void

These measures substantially improve upon the energy performance of the existing building envelope.

2. Heating, Power & Lighting

- No new heating systems or renewable energy technologies (e.g. solar panels or heat pumps) are proposed at this time.
 - Provisions for high-efficiency lighting and appliances may be made at the fit-out stage depending on future owner preference.
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3. Water Conservation

- The proposal includes a **soakaway system to the rear garden** for roof rainwater discharge, minimising mains drainage load and encouraging sustainable drainage.
 - Internally, the development will allow for installation of:
 - **Dual-flush toilets** and **aerated taps** to reduce water use
 - **Low-flow showers and appliances**, subject to fit-out
 - **Provision for water butts** can be included for future garden irrigation
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4. Materials and Waste Management

- The external materials (brickwork and roof tiles) have been chosen to match existing and where feasible will be **locally sourced**.
 - Construction waste will be **minimised and separated on-site** for reuse or recycling where possible.
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Conclusion

This development has been designed to significantly reduce carbon emissions through fabric-first energy efficiency, sustainable drainage, and water conservation measures. Although no renewable technologies are currently proposed, the energy performance of the building envelope exceeds national minimum standards, fully complying with the objectives of Policy CC05.