

Energy Statement

Site: Land South of 14, High Street, Graveley, Hertfordshire, SG4 7LB

Planning Reference: 26/02392/FP

The latest Building Regulations were introduced to drive significant improvements in the energy efficiency of buildings, with a greater emphasis on the performance of the building fabric itself, rather than relying on additional technologies to achieve equivalent levels of efficiency. The proposed design not only meets these requirements but exceeds them, demonstrating a strong commitment to energy efficiency through a fabric-first approach.

Please see the below:

- The insulation specified is above the building regulations requirements ensuring minimal heat loss.
- The build will be fully compliant with accredited details of construction.
- Details for the prevention of air leakage are specified.
- The build is specified to be tested for air leakage, thermal efficiency etc at the plans stage and again after construction to ensure efficiency and compliance. These tests are carried out by an accredited energy assessor.
- Efficient water usage is specified on the plans including low flush W/Cs.
- Efficient electric heating with each room individually controllable allows a single room to be heated. This will be via Electric radiator and/or AC.
- Efficient and fast ventilation is specified on the plans.
- House designed to allow for natural daylight and thermal comfort.
- Thermally broken lintels to avoid cold bridging are specified on the plans.
- Water butts will be installed in the garden of the new build which will collect and re-use surface water for planting.
- Grey water collection, storage and use is specified on the plans.
- Walls are brick, block and 100mm full fill cavity construction.
- Ground floor insulation is minimum of 90mm Recticel Eurowall to provide a U-Value of 0.18 W/M²K.
- Roof insulation is minimum 175mm Celotex (overall) to provide a U-Value of 0.15 W/M²K.
- First floor insulation is 100mm minimum rockwool/Celotex.
- External double glazing has 'U' value of 1.4W/m²k or less using low 'E' 0.05 soft coat glass with argon filled 20mm cavity.
- All internal artificial lighting is LED and will only be compatible with LED low watt lamps.
- All external lighting is specified as LED lighting and will be maximum 100w total.