

## **SUSTAINABLE BUILDINGS & ENERGY STATEMENT**

Reference: 272\_SB&ES

33 GAVESTON ROAD

LEAMINGTON SPA

WARWICKSHIRE

## **Introduction**

This sustainable buildings & energy statement has been prepared in accordance with local planning policy requirements to accompany a planning application for the proposed side return extension to 33 Gaveston Road, Leamington Spa. The proposed development comprises work elements as follows:

1. Single storey side return extension
2. New escape window and lightwell to front elevation
3. Alterations to ground floor rear wing fenestration
4. New double gate to the rear garden wall.

## **Policy Summary**

In appropriate residential developments Warwick Council require 10% of the predicted energy requirements to be produced on site or in the locality from renewable energy resources or to show that 10% of the energy demand of the development and its CO2 emissions would be reduced through the construction methods and materials.

## **Design and Layout**

The existing terrace building is orientated with main rooms of the house facing northeast (front) and southwest (rear). The proposed work is to the rear and side of the house.

The proposed extension and internal alterations enable a number passive energy saving strategies to be implemented including:

1. The use of masonry external walls and a high level of insulation to the floors, walls and roofs to retain heat in the winter
2. The existing side wall to the house would be effectively replaced due to the extension with a superior thermal element as the new wall would comply with more recent regulations
3. Increase glazing to the south and rooflights to increase passive solar heat gains
4. The insulation strategies above will also assist in reducing excessive solar heat gains
5. New energy efficient lighting will be used throughout the house with LED lighting used where possible
6. Water conservation will be assisted through the use of rain water butts where possible and soakaways as advised by building control
7. New dual flush toilet and low-flow rate taps will help reduce water consumption

### **Renewable energy**

Due to the scale of the proposed increase in floor area (11 sqm), it is considered too small an increase in area to justify the expense of implementing renewable energy or commissioning a specific energy report.

It should be noted that the new extension will comply and exceed current building regulations.

### **Flooding and Climate Change**

If feasible and subject to design development, new rainwater pipes will run to rainwater butts and/or soakaways as advised by the building control officer.

This statement has outlined the thinking behind the design and improvements to be made to the existing dwelling. Whilst the scale of the physical extension of the building is modest the new design and passive strategies have been actively developed to increase the overall efficiency of the house. Energy efficient design is central to the design proposals for 33 Gaveston Road.

The improved insulation strategies together with the numerous passive design strategies will contribute towards a reduction in the energy consumption and reduction in carbon emissions.

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