

Warming Barton:
New External Wall Insulation
for 27 Houses in Barton, Oxford

For Low Carbon Hub



Design and Access Statement & Property Schedule

Designers, architects and researchers • new energy futures for the built environment

by
OEx Limited



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This Design and Access Statement accompanies an application for the installation of External Wall Insulation to 27 houses in Barton, Oxford.

All the houses subject to the application are similar, based on a British Iron & Steel Federation pre-fabricated house type. Some have later additions and modifications.

A photographic survey of all the houses has been carried out, and photographs are included in the Schedule of Properties attached to this document.

This proposal seeks consent for the application of an insulated render system to the exposed external walls of all the houses.



TYPICAL EXISTING HOUSE

OBJECTIVE

The objective is to reduce heat loss through the existing building envelope. The current external wall U-value is estimated to be a very poor $2.1\text{W/m}^2\text{K}$. The addition of the proposed external wall insulation is anticipated to improve the U-value to $0.3\text{W/m}^2\text{K}$, which is in line with building regulations. In addition to the reduction in energy use, greenhouse gas emissions, and fuel cost provided by the new insulation, it is anticipated that there will be a significant increase in comfort for resident families.

EXTERNAL WALL INSULATION SYSTEM

The proposal will result in all external elevations being finished in a lightly textured render, up to the underside of the existing roofs. All existing aerals, rainwater downpipes, gas and electricity meter covers will be removed prior to the installation of the system, cleaned, and re-instated after the completion of the works.

EXAMPLE



This photograph shows the proposed JUBIZOL External Wall Insulation system applied to a simple house.

The overall external wall dimensions will be increased by the thickness of the thermal insulation and the render system, otherwise no alteration to the plan size or footprint of the application houses is proposed. The combined thickness of the render system is estimated to be no more than 120mm in total. The existing roofs project on all sides of the main houses sufficiently, hence no extension or alterations to the roof are required. Similarly no change to the internal layout is proposed. A full structural survey of the steel frame will be carried out when the existing render and cladding has been removed.

A sample of the JUBIZOL External Wall Insulation System is provided with this application.

JUBIZOL External Wall Insulation System benefits from a BBA Certificate.

COLOUR

Householders are to be provided with a choice of colour finishes to the render system.

Colour samples, in the form of a colour palette, are provided with this application.

The colour range is to be those colours in the palette marked with an *

TREES & HEDGES

Trees and hedges are present on some of the application house sites, and on sites adjoining them. However these trees and hedges will not be affected by the application of the External Wall Insulation System to external walls.

ACCESS

No changes to existing vehicle or pedestrian access to the application house sites is proposed.

The application of the External Wall Insulation System will not reduce existing door opening sizes, and will not therefore cause any additional restriction to disabled access to the application houses.