



Policy JP-S2 - Carbon and Energy Statement

Description

Change of use from Shop and Premises (Class E(a)) to: - Ground Floor - Sui Generis (two number hot food takeaways) and Class E(a) Retail Unit - First Floor - Class E(c)(iii) Commercial Unit - Second and Third Floor - C3(a) Two Bedroom Apartment

Address

85 The Rock Bury BL9 0NB

Client

Assh Properties Limited

Date

20.04.2024

The property

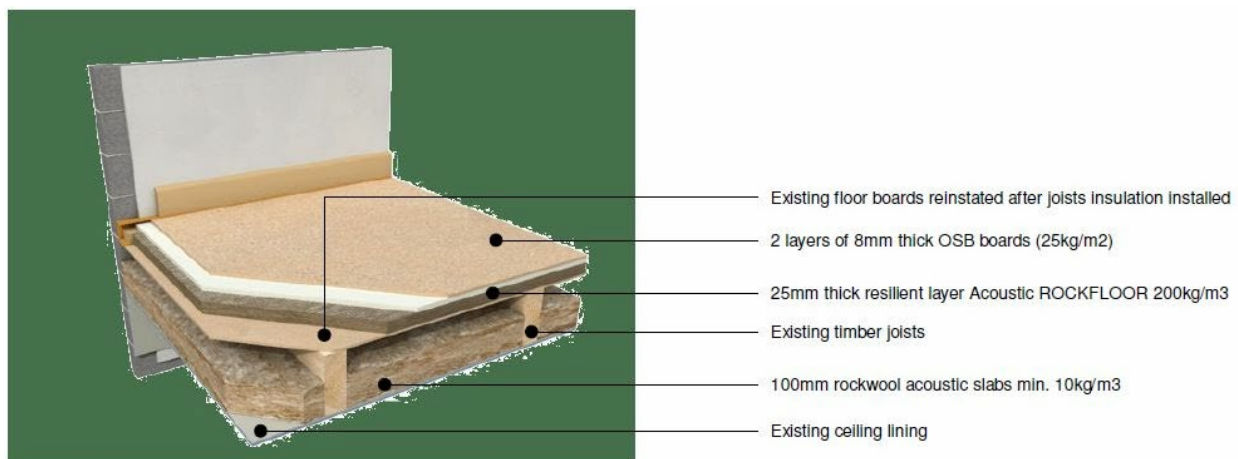
The property is located at the heart of Bury Town Centre near the famous The Rock

How to minimise energy demand:

PROPOSED SEPARATING FLOOR DETAIL

In an poorly insulated building energy demands are often higher. To reduce energy demand separating floors will be insulated to achieve both thermal acoustic performance. The detail below shows the intended separating floor construction. This detail complies with both part B, E and L of the building regulation. This detail will be used between the basement and ground floor unit, ground floor retail and office units on first floor and between first floor retail units and second floor flat.

This floor type will reduce heat loss between floors.



Separating Floor Detail



EXTERNAL WALLS

External walls will be drylined with 92.5mm thick insulated plasterboard on timber battens at 600mm centres. This should increase the wall U-value to around 0.21 W/m²K. Current u-value if 0.30 W/m²K

Solid masonry walls

215 mm solid brickwork

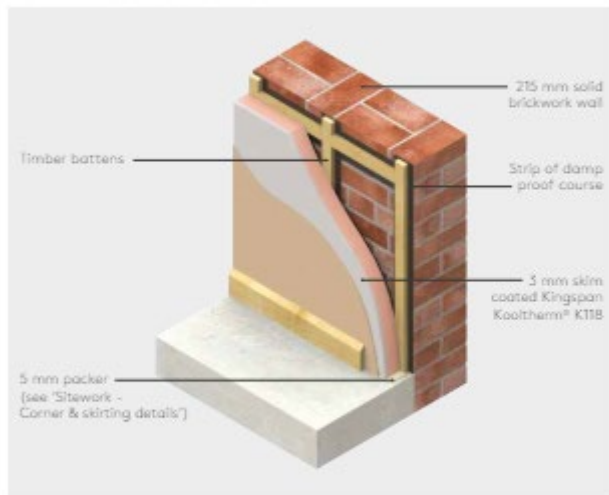


Figure 1

U-values (W/m ² K) for various thicknesses of Kingspan Kooltherm® K118 and different fixing methods	
Product thickness* (mm)	U-values (W/m ² K)
Timber battens at 600 mm centres	
52.5	0.35
57.5	0.32
62.5	0.30
72.5	0.26
82.5	0.23
92.5	0.21
Metal studding / channels at 600 mm centres	
57.5	0.33
62.5	0.31
72.5	0.27
82.5	0.24
92.5	0.22

* Product thickness = Insulant thickness + 12.5 mm plasterboard.

NB Refer to local distributor or Kingspan Insulation price list for current stock and non-stock sizes.

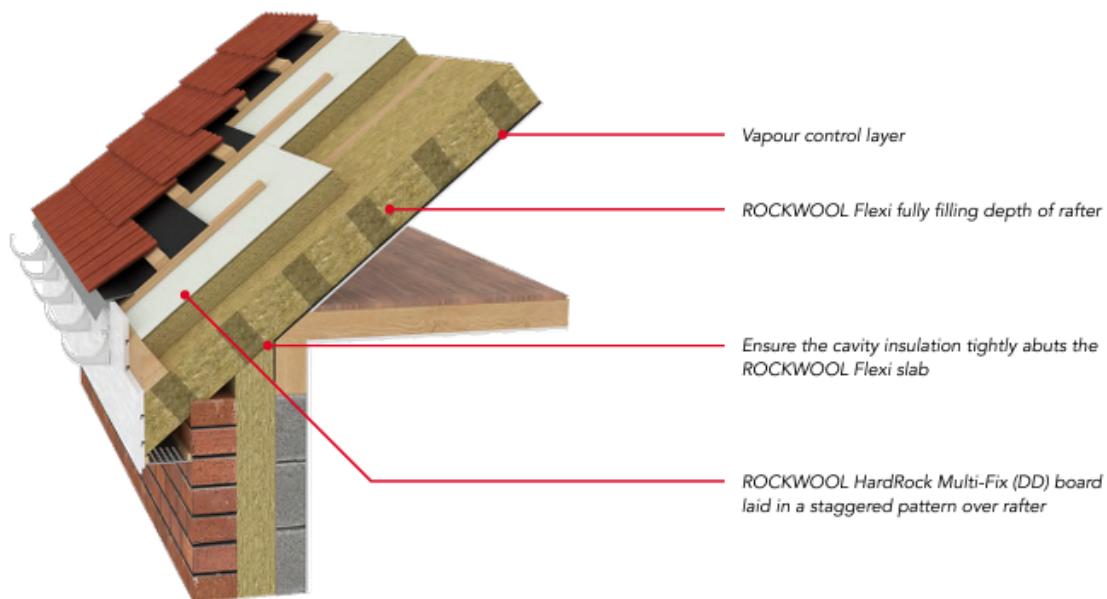
NB Suitability of Kingspan Kooltherm® K118 in this application should be assessed against the relevant regulatory and best practice frameworks. Please see the [Kingspan Insulation website](#) for further information.



ROOF CONSTRUCTION

The roof will finishing board to be stripped off and new Rockwool mineral wool insulation to be installed with timber rafters using Rockwool Rockfall insulation. 200mm insulation between rafters and 60mm thick over rafters to achieve a combined u-value of 0.16 W/m²K. Current building regulation requirements is 0.18 W/m²K.

RockFall



The RockFall system minimises thermal bridging and provides an effective acoustic barrier against external noise pollution. The system comprises a high-density ROCKWOOL HardRock Multi-Fix (DD) board mechanically fixed over the rafters beneath a BBA approved breather membrane, with ROCKWOOL Flexi fitted between rafters. An airtight VCL membrane is stapled to the underside of the rafters finished with 12.5mm plasterboard.

The thicknesses shown are to meet the specified U-values and may not reflect the commercial thicknesses available. All stated U-values should be verified with the ROCKWOOL technical solutions team before ordering.



maximise energy efficiency

WINDOWS

All windows are double glazed and all external doors are to be thermally efficient.

HEATING SYSTEM

New boiler models with a high energy-efficiency rating (A+++ rating) to significantly reduce energy consumption and greenhouse gas emissions.

OTHER METHODS OF REDUCING HEAT LOSS

- All cracks and gaps sealed.
- Blinds to be installed to areas of glazing that might receive a lot of direct sunlight during summer or hotter months.
- Building relies on natural lighting and natural ventilation.
- While not part of the application there is scope later for the client to be to install solar panels on the roof. Renewable energy sources are good for the environment as they use natural resources such as wind or sunlight to generate electricity. The best part is that renewable energy never runs out, making it an infinite resource. Area of possible solar panels is indicated on the drawings.