SA47065 - Moss Villa – Chapel Lane – Bronington – Near Whitchurch – Shropshire – SY3 3HR

Listed Building Consent – Ref. P/2024/0248
Condition(s)

6. Prior to installation, details of all thermal upgrade works to the buildings shall be submitted to and approved in writing by the Local Planning Authority. The works shall only be carried out in strict accordance with such details as are approved.

External Walls
The build-up is shown on the following drawings and accompanying trade literature.

Drawing Number	SA47065/BRY/XX/PL/A/01/A	Existing house plans & elevations
	SA53885/BRY/XX/PL/A/01	Proposed Floor Plans GA's
	SA47065/BRY/XX/DT/A/003/A	Existing Joinery Details
	SA47065/BRY/XX/DT/A/004/A	Existing Joinery Details
	SA47065/BRY/XX/DT/A/005/D	Proposed Joinery Details
	SA47065/BRY/XX/DT/A/006/D	Proposed Joinery Details
	SA47065/BRY/XX/DT/A/007/D	Proposed Joinery Details
Trade Literature	Ty-Mawr's LABC Registered internal Wall Insulation System	

We are proposing a 40mm Woodfibre board with lime-based plaster. This will provide an upgrade to the U value but won't be as high as more modern techniques / materials such as Kingspan. There will need to be a more relaxed approach taken by Building Control for the existing building which we would hope to be supported due to the listing.

Windows
We are proposing slimline double glazing to the replacement timber windows as shown in the drawings listed above.

Roof
For the upgrades to the roof of the existing building we are proposing natural fibre insulation products. A Woodfibre board fitted to the inner face of the rafters which can be finished with an appropriate lime-based plaster
Schneider Multitherm 140 (Internal use onto Timber)
For the areas of roof where we have a flat ceiling and for the spaces between the rafters (to supplement the Woodfibre board) we are proposing the use of Ty-Mawr Thermafleece Cosywool Insulation
Ty-Mawr Lime - Sustainable Building Materials for Healthier Homes

Ground Floor
We are proposing Ty-Mawr Sublime Insulated Limecrete Floor which will provide damp protection, insulation and act as a structural hardcore.
Ty-Mawr Lime - Sustainable Building Materials for Healthier Homes
We are proposing underfloor heating which can be accommodated subject to important rules being followed such as ensuring the limecrete is given sufficient time to cure / dry.

Proposed New Build Extension

Whilst the methods proposed for the existing building are more 'natural' and sympathetic to the heritage of the existing building we are proposing a more modern approach to the new build extension. This will help balance the lower U values achieved within the existing part of the dwelling and help meet building regulation requirements.

External Wall Construction

within the new build element

Outer leaf of reclaimed brickwork to match existing
125mm cavity partially filled with
115mm Kingspan Kooltherm K106 cavity Board
(Thermal conductivity of 0.018 W/mK)
10mm residual cavity.
Outer facing of insulation has a water-tight vapour-open polypropylene fleece outer facing protects against moisture penetration
100mm inner leaf of medium density blockwork (7.3N)
12.5mm plasterboard and skim on dabs
Provide a U value of 0.14 W/m^2K

Roof Insulation

within the new build element

Softwood treated timber rafters at lower level below horizontal truss chord fully filled with
100mm rigid insulation (Kingspan Kooltherm K107)
57.5mm Insulated Plasterboard (Kingspan Kooltherm K118) foil faced rigid insulation with taped joints and skim to be fixed under rafter to help avoid cold bridging.

Ground Floor Construction

within the new build element

Selected floor finish by client
75mm concrete screed (incorporating underfloor heating) on
Slip layer Visqueen vapour control barrier on
150mm Kingspan Thermafloor TF70 or similar approved insulation
25mm insulation to be turned up at edges to help prevent cold bridging
Visqueen membrane installed to manufacturers recommendations and lapped up to meet Hyload DPC.
If radon is present appropriate protection will be required.