

Roof truss to structural engineers design and details.

Trusses to be supported and fixed to 100x50mm wall plate strapped down to inner leaf of blockwork wall. Lateral restraint straps to first three trusses parallel to separating wall at both roof and ceiling, all in full accordance with BS 5268 and manufacturers instruction.

400mm Earthwool Loft Roll 44, in roof space to achieve U-value of 0.11W/m<sup>2</sup>K (100mm between joists and 2x150mm above)

Redland Regent Concrete Profiled Roof Tile Smooth - Terracotta on 25x38mm tiling battens at a suitable gauge to suit roof pitch, on all roofing felt, as manufacturers details and recommendations.

Roof felt/membrane

Vapour barrier

Cavity to be closed off with proprietary thermal cavity closure

75mm Kingspan Kooltherm K108 Cavity Board

Stalfix RT2 225mm cavity wall ties to BS EN 845-1 set at 900x450mm centres, doubled up around openings

Weepholes above windows at 450mm centres

4650 Head

Insulated lintel with integral DPC, or similar approved, to structural engineers details and recommendations

Vapour barrier

Windows to achieve a U-value of 1.4W/m<sup>2</sup>K constructed with accredited details

3525 Cill

Kingspan Thermabate 100 cavity closure

Soldier course to match existing

Vapour barrier

T&g chipboard flooring

47x170 C16 timber joists @ 600 ccs

2530 First Floor

Plasterboard ceiling

Soldier course to match existing

Insulated lintel with integral DPC, or similar approved, to structural engineers details and recommendations

External wall to achieve a min. U-value of 0.18W/m<sup>2</sup>K and constructed in accordance with:

102.5mm facing brick to match existing 100mm thick thermal blockwork 75mm Kingspan Kooltherm K108 partial fill cavity insulation, or similar approved 12.5mm plasterboard on dabs

Perimeter of all walls to be fully sealed, including around opening to prevent air leakage.

Windows to achieve a U-value of 1.4W/m<sup>2</sup>K constructed with accredited details

25mm perimeter edge strip insulation

0 FFL

Weapholes at 900 centres

Separating layer from under screed to be lapped up face of perimeter strip insulation and terminated at floor level

DPM from under insulation to be lapped up face of blockwork and lapped over DPC min. 150mm

Foundations to S.E design

Existing foundation

Existing insulation

Existing cavity capped with 18mm external quality ply

Existing cavity to be closed off with proprietary thermal cavity closure

Steel design to S.E details and recommendations

2x12.5mm plasterboard boxing to provide 60mins FR.

Internal partition walls into bedrooms to provide resonable resistance to sound in accordance with approved Doc. Part E - min. 30dB Rw

First floor to be formed using 47x170 C16 timber joists @ 600 ccs supported off proprietary galvanised mild steel joist hangers. All the structural engineers details and recommendations. 18mm T&G chipboard flooring fixed on top of floor joists, all to manufacturers details and recommendations. Edges of boards to be fully sealed with mastic sealant to prevent air leakage. The contractor is to allow for laying 150mm thick acoustic quilt with a density of no less than 10kg/M3.

Storage and socket layout to be confirmed

1200

1400

1000

450

2793

2540

13

18

18mm exterior ply to carry three layer roof membrane on 50mm treated s.w battens. Proposed membrane to lap existing batten, existing roof membrane to then lap proposed.

Timber valley board on top of trusses with lead sheets and welts to seal valley.

Existing tiles removed carefully and stored. Batons removed to allow insulation to pass through. Existing roof membrane cut back

4660 Head

3525 Cill

2.530 m

2100 Head

600 Cill

Window cill and head heights to match existing and to be confirmed on site

0.000 m

Level 0

-0.150 m

External Ground

25° Pitch

25° Pitch

Redland DryVent Ridge System for Half Round Ridge Tile as tile manufacturers details and recommendations.

Redland Regent Concrete Profiled Roof Tile Smooth - Terracotta on 25x38mm tiling battens at a suitable gauge to suit roof pitch, on all roofing felt, as manufacturers details and recommendations.

400mm Earthwool Loft Roll 44, in roof space to achieve U-value of 0.11W/m<sup>2</sup>K (100mm between joists and 2x150mm above)

18mm external quality ply to cap off cavity

Hambleside Danelaw 3 in 1 Eaves Ventilation Pack 25,000mm<sup>2</sup> - 6m Pack

Over fascia vent to provide continuous ventilation equivalent to 10mm continuous air gap

5025 Top course

4820 TBC

9mm thick uPVC fascia board

9mm thick uPVC soffit board

Ensure the gap between the wall plate and the eaves ventilation is completely filled with insulation. Ensure full depth of insulation between and over joists abuts the eaves insulation.

Indicated 100x50mm S.W treated timber wall plaste strapped to inner leaf using galvanised steel straps at 2m centres

External wall to achieve a min. U-value of 0.18W/m<sup>2</sup>K and constructed in accordance with:

102.5mm facing brick to match existing 100mm thick thermal blockwork 75mm Kingspan Kooltherm K108 partial fill cavity insulation, or similar approved 12.5mm plasterboard on dabs

Perimeter of all walls to be fully sealed, including around opening to prevent air leakage.

Stalfix RT2 225mm cavity wall ties to BS EN 845-1 set at 900x450mm centres, doubled up around openings

25mm perimeter edge strip insulation

Indicated continuous DPC 150mm min above ground floor level to the inner and outer leafs of the external wall structure lapped with DPM in floor

Weepholes at 900mm centres

Existing fence

New 600 dia. polypropylene inspection chamber. Circular cover and frame to BS EN 124 - class D400 footpaths and paved areas - class B125

Assumed 150mm C20 concrete surround and base and backfilled with MOT and packed.

Brickwork below the DPC level is to be class 'B' engineering brickwork

100mm 7N blockwork to sub structure

Indicates weak mix concrete angled at 30° towards external wall

Concrete lintels to structural engineers details and recommendations

Opening to give 50mm space all round the existing pipe. Mask opening both sides with rigid sheet material to prevent entry of fill or vermin. Fill voids with compressible sealant to prevent entry of gas.

Concrete foundations to structural engineers details and recommendations

Section A-A

1: 20 @ A1

Section B-B

1: 20 @ A1

Ground floor construction to comprise of 65mm thick screed. The screed is to be stopped 25mm from the external walls, with 25mm thick continuous floor edge insulation strips. Screed to be laid on 500 gauge polythene separating layer with 150mm min. lapped and taped joints. Separating layer to be taken from the underside of the screed and returned up the perimeter and terminatd at floor level. The separating membrane is to be laid on 60mm Kingspan Kooltherm 103 Floorboard or similar approved. The insulation to be laid on 1200 gauge DPM with 150mm min. lapped and taped joints, taken up the inner leaf wall and lapped and taped over the DPC. All in strict accordance with manufacturers details. DPM to be laid on 150mm ground bearing concrete slab over 150mm well consolidated inert hardcore - all the the strctural engineers details and recommendations. All to provide a U-value of 0.12W/M<sup>2</sup>K.

Contractor is to ensure that the whole of the area to be built on/over is fully treated with a suitable weed killer and the ground free of all vegetable matter/timber.