

ROOF DETAIL

Breathable sarking felt to BS747
or relevant BBA Certificate

There should be a minimum 10mm gap between
the membrane and the tile / slate batten to
afford a drainage channel for any
penetrating rain

Roofing slates to match
existing

47 x 100mm Grade C16 rafters at max
400mm centres max span 2.47m

100 x 50 C16 ceiling joists at 400mm centres
fixed to rafter feet and wall plate and 100 x 50
timber pole plate resin bolted to wall

Fit an eaves strip of a UV-resistant material
to overhang the eaves / fascia by 50-60mm

270 mm quilt insulation at ceiling level

12.5 mm plaster board fixed to ciling joists with 5mm skim coat of finishing plaster

FOUNDATION DETAIL

100M Dritherm Cavity Batt Insulation

100mm lightweight block, K value 0.16,
(Aircrete, Celcon solar, Topblock Toplight
Standard)

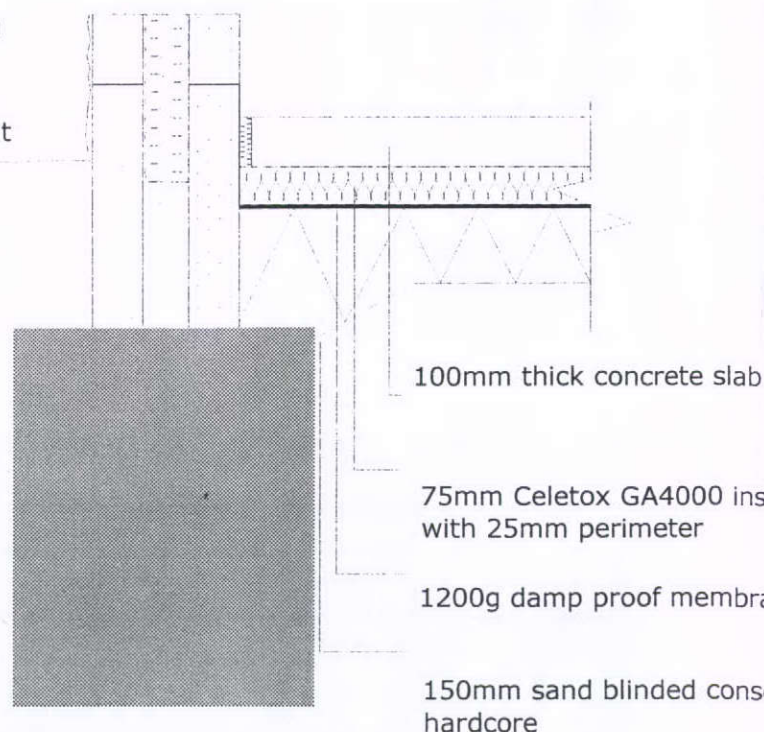
20mm two coat sand/cement render

DPC 150mm above ground

Lean mix cavity fill 225mm below DPC

600mm wide concrete trench
foundation minimum grade of ST1
or GEN

Depth to be 750mm deep depending on
ground conditions to be agreed with BCO



100mm thick concrete slab

75mm Celetox GA4000 insulation
with 25mm perimeter

1200g damp proof membrane

150mm sand blinded consolidated
hardcore

TRENCH FOUNDATION

750mm x 600mm trench fill foundations, concrete
mix to conform to BS EN 206-1 and BS 8500-2.
All foundations to be a minimum of 800mm below
ground level, exact depth to agreed on site with
BCO to suit site conditions. Ensure foundations are
constructed below invert level of any adjacent
drains.

SOLID FLOOR INSULATION UNDER SLAB

To meet min U value required of 0.22 W/m_K
Solid ground floor to consist of 150mm
consolidated well-rammed hardcore. Blinded with
50mm sand blinding. Provide a 1200mm gauge
polythene DPM, DPM to be lapped in with DPC in
walls. Floor to be insulated over DPM with 75mm
thick Celotex with 25mm insulation to continue
around floor perimeters to avoid thermal bridging.
Provide 100mm ST2 or Gen2 ground bearing slab
concrete mix to conform to BS 8500-2 over
insulation.

DPC

Provide horizontal strip polymer (hyload) damp
proof course to both leafs minimum 150mm above
external ground level. New DPC to be made
continuous with existing DPC's and with floor DPM.
Vertical DPC to be installed at all reveals where
cavity is closed.

FULL FILL CAVITY WALL

To achieve minimum U Value of 0.28W/m_K
20mm two coat sand/cement render to comply
to BS 5262 with waterproof additive on 100mm
lightweight block, K value 0.16, (Aircrete,
Celcon solar, Topblock Toplite Standard). Fully
fill the cavity with 90mm Rockwool Cavity
insulation as manufacturer's details. Inner leaf
to be 100mm lightweight, K value 0.16,
(Aircrete, Celcon solar, Topblock toplite
standard). Internal finish to be 12.5 mm
plasterboard on dabs. Walls to be built with
1:1:6 cement mortar.

WALL TIES

All walls constructed with stainless steel vertical
twist type retaining wall ties built in at 750mm
ctrs horizontally, 450mm vertically and 225mm
cts at reveals and corners in staggered rows.
Wall ties to be suitable for cavity width and in
accordance with BS 1243.

EXISTING TO NEW WALL

If a continuous cavity cannot be achieved,
where new walls abuts the existing walls provide
a movement joint with vertical DPC. All tied into
existing construction with suitable proprietary
stainless steel profiles.

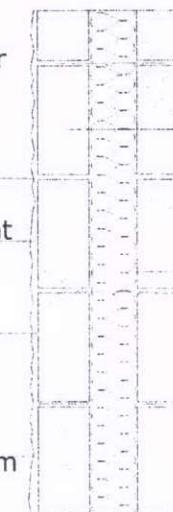
WALL DETAIL

Walls to be built with 1:1:6 cement mortar

20mm two coat sand/cement render

Stainless steel retaining wall ties built in at
750mm ctrs horizontally, 450mm
vertically and 225mm ctrs at reveals and
corners in staggered rows

Horizontal strip polymer (hyload) damp
proofcourse to both leafs minimum 150mm
above external ground level



100mm lightweight block, K
value 0.16, (Aircrete, Celcon
solar, Topblock Toplight
Standard)

100mm Dritherm cavity batts

Internal finish to be 12.5mm
plasterboard on dabs