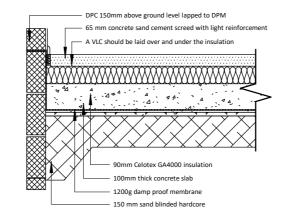


Bedroom 11 m² Bedroom 8 m² Bedroom 8 m²

TRENCH FOUNDATION 50 mm residual cavity DPC 150mm above ground level 45 mm Celotex insulation Masonry wall as detailed by architect Lean mix cavity fill 225 mm below DPC 750 mm x 600 mm concrete trench foundation. Concrete mix to confirm to BS EN 206-1. and BS 8500-2 Depth to be 1000 mm deep depending on ground conditions to be agreed with BCO 100 mm thick concrete slab 1200g damp proof membrane ground conditions to be agreed with BCO

Provide 750mm thick trench fill concrete foundations with a minimum width equal to the width of the wall plus 300mm. Concrete mix to conform to BS EN 206:2013 (+A2:2021) and BS 8004:2015 Code of practice for foundations (+A1:2020). All foundations to be a minimum of 1000mm below ground level, depth and size of foundation to be approved on site by Building Control to suit site conditions. All constructed in accordance with 2010 Building Regulations A1/2 and BS 8004 Code of Practice for Foundations (+A1:2020). Ensure foundations are constructed below invert level of any adjacent drains. Base of foundations supporting internal walls to be min 600mm below ground level. Sulphate resistant cement to be used if required. Please note that should any adverse soil conditions or difference in soil type be found, or any major tree roots in excavations, Building Control to be contacted and the advice of a Structural Engineer should be sought.

SOLID GROUND FLOOR

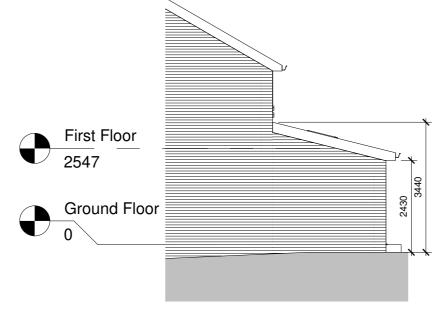


P/A ratio 0.5
Solid ground floor to consist of 150mm consolidated well-rammed hardcore, blinded with 50mm sand blinding. Provide 100mm ST2 or Gen1 ground bearing slab concrete mix to conform to BS 8500-2:2023 and BS EN 206 over a 1200 gauge polythene DPM. DPM to be lapped in with DPC in walls. Floor to be insulated over slab and DPM with min 90mm thick

25mm insulation to continue around floor perimeters to avoid thermal bridging. A VCL should be laid over the insulation boards and turned up 100mm at room perimeters behind the skirting, all joints to be lapped by 150mm and sealed. Finish with 65mm sand/cement finishing screed with light mesh reinforcement.

Where drain runs pass under new floor, provide A142 mesh 1.0m wide and min 50mm concrete cover over length of drain.

First Floor 2547 Ground Floor 0



First Floor

1:100

FULL FILL CAVITY WALL 103 mm facing brick 90mm Kingspan Kooltherm K106 10mm cavity between the insulation Stainless steel retaining wall ties built in at 750 mm ctrs horizontally, 450 mm vertically and 225 mm ctrs at reveals and corners in staggered rows Horizontal strip polymer (hyload) damp proof course to both leafs min. 150 mm above external ground level

FULL FILL CAVITY WALL

Celotex GA4000 insulation.

TRENCH FOUNDATION

To achieve minimum U Value of 0.18 W/m²K

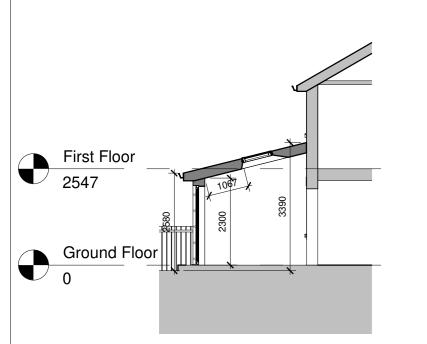
SOLID FLOOR INSULATION OVER SLAB

To meet min U value required of 0.18 W/m²K

New cavity wall to comprise of 103mm suitable facing brick. Full fill the cavity with 90mm Kingspan Kooltherm K106 full fill insulation as manufacturer's details, leaving 10mm cavity between the insulation and outer skin. Inner leaf to be 100mm medium block, 0.45 W/m²K. Internal finish to be 12.5mm plasterboard on dabs. Walls to be built with 1:1:6 cement mortar.

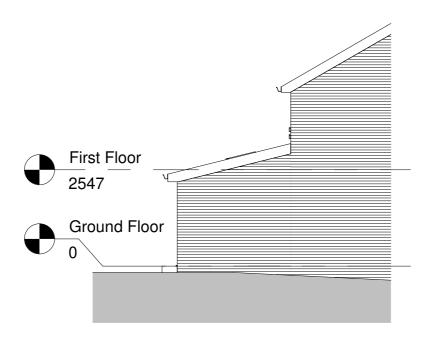
Vertical joints in the board must be staggered and all joints tightly butted. All details including corner and junction to be as relevant BBA certificate. Location to be assessed for suitability of insulation boards.

Rear Elevation

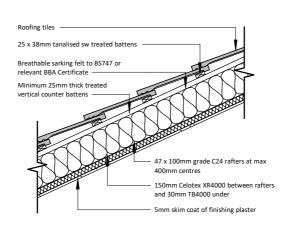


1:100

Left Elevation 1:100



PITCHED ROOF



UNVENTED PITCHED ROOF

Pitch 22-45° (imposed load max 0.75 kN/m² - dead load max 0.75 kN/m²)

To achieve U-value 0.15 W/m²K
Timber roof structures to be designed by an Engineer in accordance

with NHBC Technical Requirement R5 Structural Design.
Calculations to be based on BS EN 1995-1-1:2004 Eurocode 5:
Design of timber structures (+A2:2014). Roofing tiles to match

existing on 25 x 38mm tanalised sw treated battens, battens fixed to minimum 25mm thick treated vertical counter battens over breathable felt to relevant BBA Certificate, proprietary eaves carrier system to be installed. Counter battens to be fixed to 47 x 150mm grade C24 rafters at max 400mm centres, max span 3.47m. Rafters supported on 100 x 50mm sw wall plates.

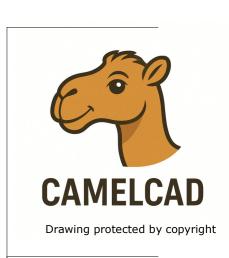
Insulation to be 150mm Celotex XR4000 between rafters and 30mm TB4000 under. Fix 12.5mm plasterboard (joints staggered) over VCL. Finish with 3mm skim coat of finishing plaster to the underside of all ceilings. Provide cavity tray where roof meets existing wall. Restraint strapping - Ceiling joists tied to rafters (if raised collar roof consult Structural Engineer). 100mm x 50mm wall plate strapped down to walls. Ceiling joists and rafters to be strapped to walls and gable walls, straps built into cavity, across at least 3 timbers with noggins. All straps to be 1200 x 30 x 5mm galvanized straps or other approved to BS EN 845-1 (+A1:2016) at 2m centres.

Section AA

Right Elevation

Details

1:20



BUILDING REGS STAGE

Proposed Drawing XXXXXXX
As @ A2 indicated CC10