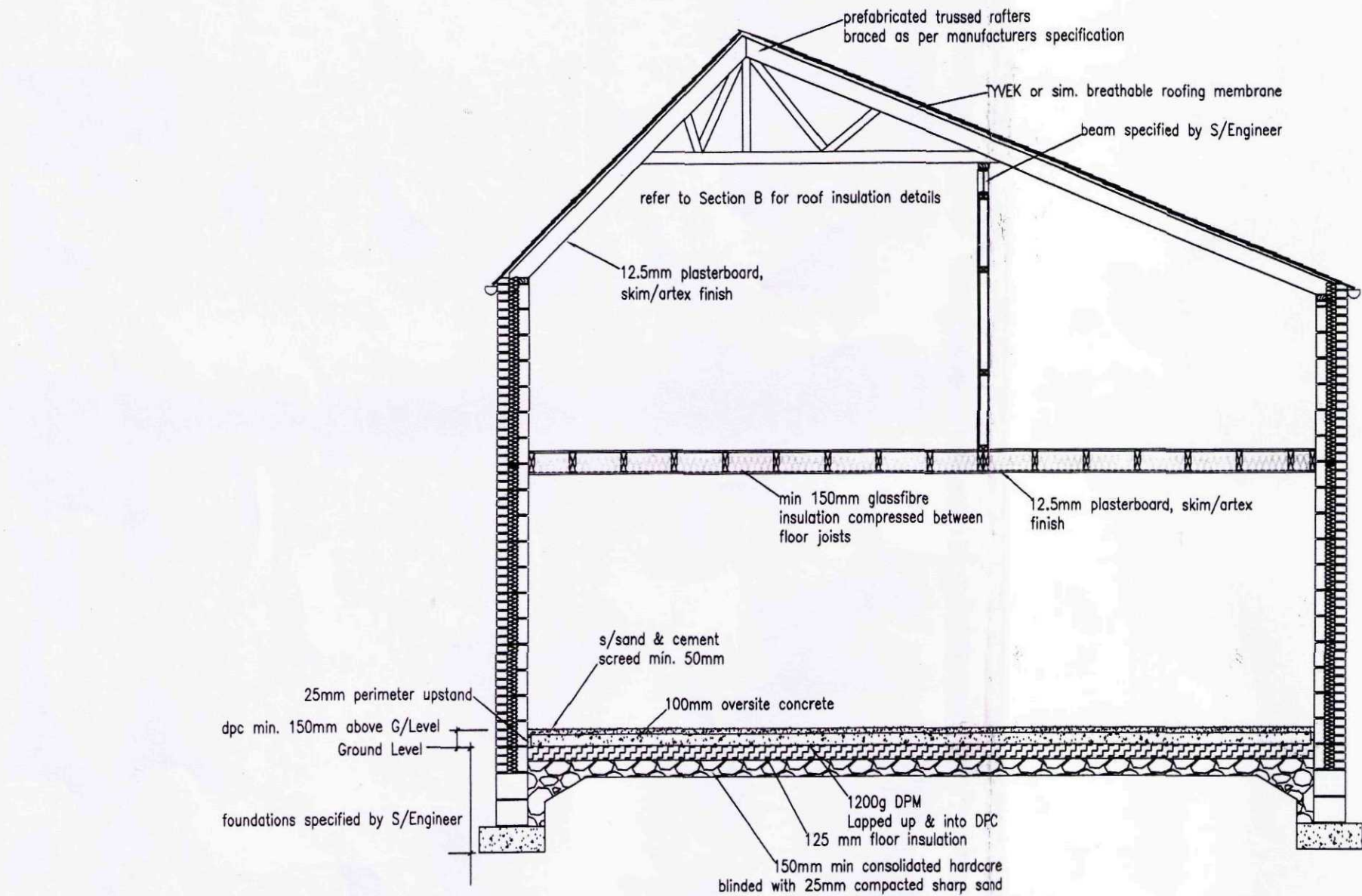




SECTION A-A

FOUNDATIONS

As per Structural Engineers details- refer to additional information supplied

GROUND FLOOR CONSTRUCTION

As no subsoil investigations have been carried out at Building Regulation Stage, it is to be assumed that subsoil conditions are adequate to support this type of floor construction. should inadequate sub-soils be found Local Authority Building Control & Wernman Design Solutions must be informed to enable alternative & appropriate measures to be employed.
min. 50mm s.sand/cement screed, (use min. 65mm s.sand/cement screed reinforced if Jobfloor70, Celotex or sim. laid on top of concrete oversite)
100mm min. concrete oversite (EN3 mix Jobfloor70 130mm thk or Celotex double R zero80mm thk, with Jobfloor70 or Celotex min. 25mm thk. perimeter upstands to eliminate thermal bridging, (upstand depth equal to floor insulation and screed thk. and not exceeding combined thk. of wall plaster and skirting)
all boards to be laid with tight butted joints & to manufacturers instructions, DPM to be 1200 gauge polythene membrane taken up to DPC and lapped over to provide continuity with the dpc's installed within the surrounding walls, all to give 'U' value 0.22w/m²/K, min. 25mm thk s/sand blinding over min. 150mm well consolidated clean hard-core, (in excess of 100mm to max. 600mm, the hard-core is to be laid and compacted in layers not exceeding 150mm)
if foil backed insulation is to be used install 1200 gauge polythene membrane under & over insulation to protect against adverse affect to concrete

CAVITY WALLS

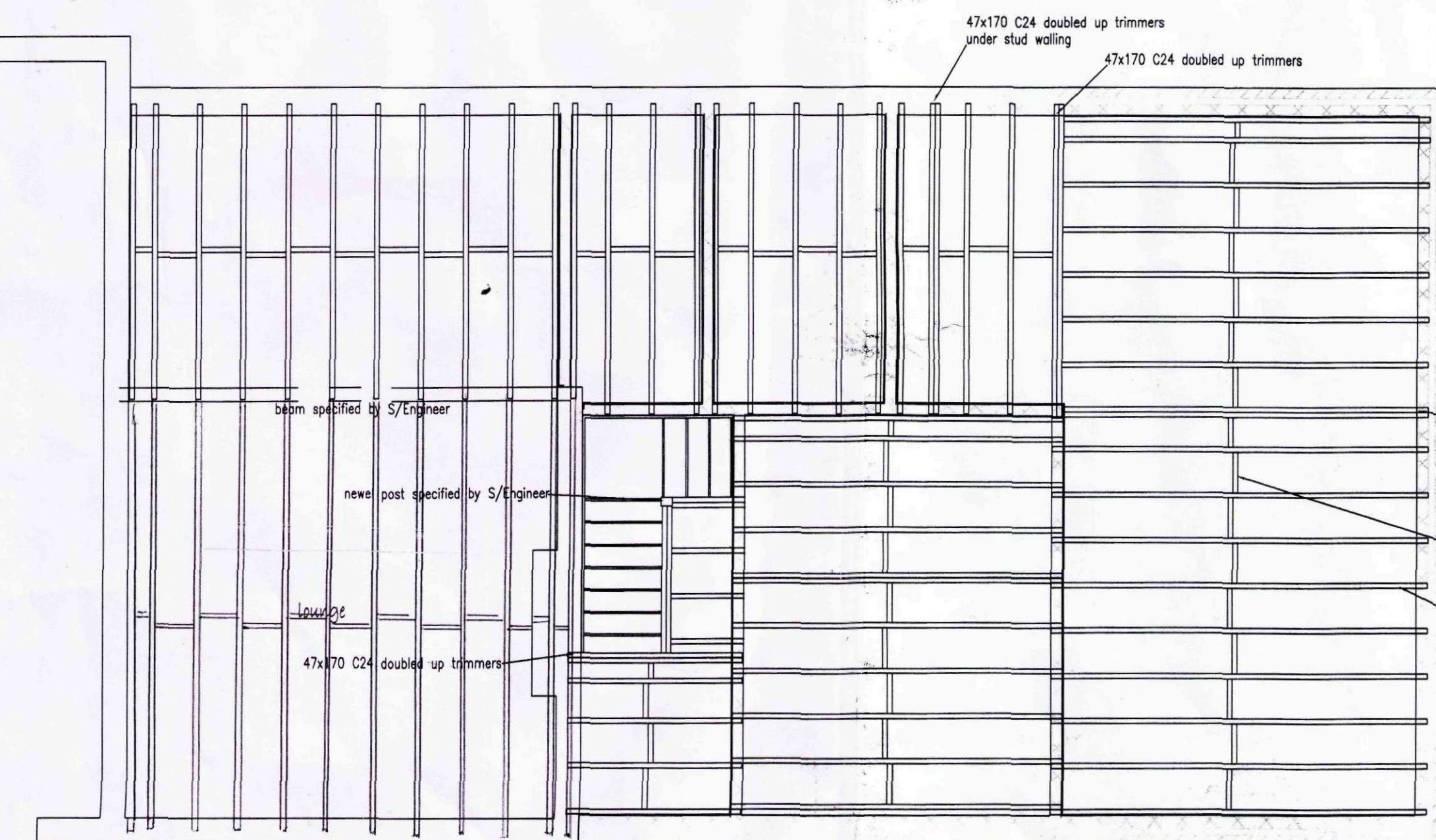
new cavity walls, comprising of 102mm facing brickwork, 85mm cavity filled with 85mm Dntherm32 insulation installed to manufacturers instructions, insulation should commence at same level as floor insulation & butted up to roof insulation without any gaps, ensuring batts have staggered joints. 100mm alcrete 3.5N blocks to achieve a 'U' value of 0.28 W/m²/K. Blockwork to be rendered & skimmed to BSEN 13914-1-2005: internal plastering, or, 12.5mm Gyproc plasterboard on adhesive dabs, fitted to manufacturers spec. & skimmed. Type of plastering technique employed as with all joint finishing to be clients choice.
Softwood skirting board/architrave to all internal walls, type i.e. Ogee, chamfered etc. to be to clients choice.
All mortar mixes/movement joints as recommended by the brick/block manufacturer & in accordance with B.S.5628:part 3 & relevant codes of practice.
Stainless steel or sim. approved wallties installed to comply with B.S.1243:1978, @ 900 ctrs. horizontally & 450 ctrs. vertically, staggered and @ 300 ctrs. as near to door/window reveals as possible.
Install insulated cavity closures to jombs & cills (DAMCOR or sim. approved).
Class 'K' concrete or sim. approved blocks below ground level, any brickwork below ground level to be F.F. quality to B.S.3921.
Any drains passing through walls to have a pre-stressed concrete lintel over with min. 50mm gap around the pipework filled with compressible material & masked on both sides of wall with rigid material in order to prevent the infestation of rodents. Any drains under proposed to be of continuous length with no joints under the floor. Ideally route all F.W. pipework around proposed if gradients can be achieved.
DPC's & DPM's to be lapped & continuous, if Expanet or sim. approved wall starters are to be installed they must be fitted to manufacturers instructions.

INTERNAL GROUND/FIRST FLOOR BLOCKWORK WALLS

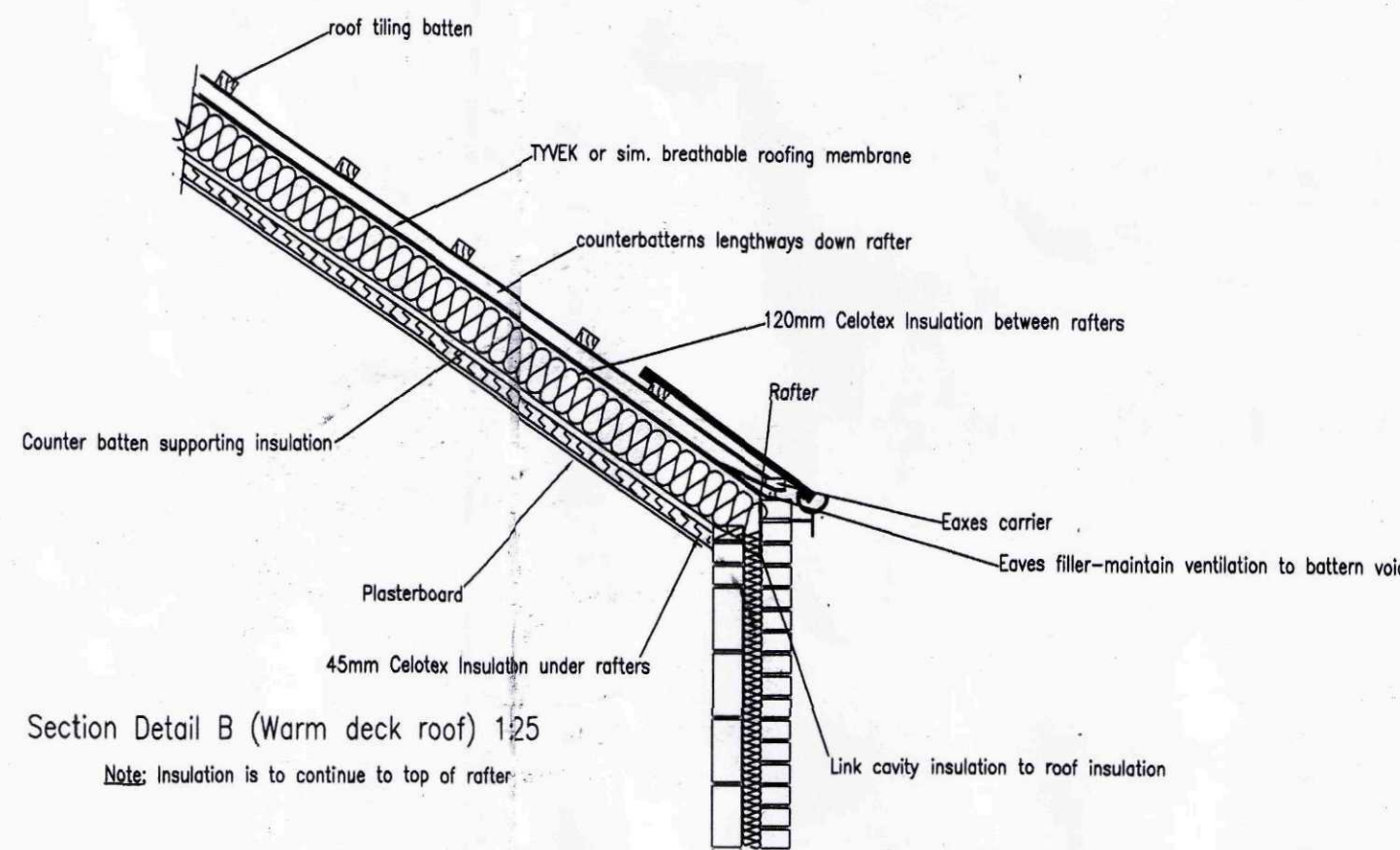
100mm Tarmac or sim. approved block, rendered & skimmed both sides to B.S. 5492, or 12.5mm Gyproc plasterboard on adhesive dabs fitted to manufacturers spec.
softwood skirting/architrave type i.e. Ogee, Chamfered to clients choice.
All mortar/expansion joints to manufacturers instructions & to B.S.5628: part 3 & relevant codes of practise

INTERNAL FIRST FLOOR WALLS

(STUD WORK)
Stud partitions to comprise of 75mm x 50mm head & sole plates with braced 75mm x 50mm studwork @ 400mm ctrs. min. 100mm Crown Wool Fibreglass insulation compressed between 12.5mm plasterboard and skim to both sides. Softwood skirting/architrave type to clients choice i.e. Ogee, Chamfered etc..
All off doubled up floor joists. To shower tray studwork areas, provide, 12mm water resistant boarding.



PROPOSED FIRST FLOOR JOIST PLAN



Section Detail B (Warm deck roof) 125

Note: Insulation is to continue to top of rafter.

EXTERNAL LINTELS TO DOORS & WINDOWS

All lintels to brick/blockwork openings to be Catnic/Birtley or I.G. messrs. or sim. approved to BSEN 1142 1991 for galv. steel. all installed to manufacturers instructions with min. bearing 150mm.
Lintels to cavity walls to be insulated & installed with a flexible dpc in accordance with B.S.5628 & NBC requirements, extended to the front edge, 50mm - 150mm beyond the end of the lintel forming end stops into perpendicular joints of masonry. Weepholes to be provided @ 450 ctrs, min. 2N.
Masonry should not over hang any lintel flange by 25mm max. Toe of lintel must project beyond the window/door frame & a flexible seal must be provided between underside of lintel flange & frame to avoid moisture penetration.
A cavity tray is not required where a lintel is protected by an eaves overhang.
All lintels exposed internally to have 12.5mm fireline board & skim or 15mm min. lightweight plaster & skim offering 30 mins. fire resistance.
All lintel lengths to be checked on site prior to ordering

INTERNAL LINTELS

All internal lintels to be either:
Catnic, Birtley or I.G. messrs galv. steel or,
pre-stressed conc.
with min. bearing 150mm both ends. installed to manufacturers instructions.

FIRST FLOOR CONSTRUCTION

22mm Weyroc or sim. approved T&G flooring board screwed or glued to floor joists (water resistant in bathroom/ensuite areas)
off 47x170mm C24 timber joists @ 450 ctrs. or same as existing if larger.
Between floor joists over ceiling below lay min. 150mm Crown Wool fibre glass insulation, or as per spec if over garage.
Under all first floor walls & baths double/teeble up joists as required or as plan. Joists to be built to external & internal walls, min. 90mm bearing with all gaps around joists sealed with appropriate sealant, 1.5m x 100mm x 1.5mm galvanised strap @ max 2m ctrs, ensuring straps span min. 3No joists when running parallel to blockwork, install min. 38mm thk. noggins between joists.
All new ceilings to be min. 12.5mm plasterboard & skim/artex finish. (Clients choice).
All joints to be staggered & joints/edges to be finished to manufacturers spec. i.e. Gyproc 'easy fit' and tape.

BELOW GROUND DRAINAGE

POUL WATER DRAINAGE TO BE INSTALLED IN ACCORDANCE WITH APPROVED DOCUMENT H1 OF THE BUILDING REGULATIONS 2002. & BS 4680 (2000). Installation to BS 855 Part 6 1980.

New drains to be 110mm min. PVCU Marley solid wall under ground pipe, with flexible joints Refer to drawing for layout details.
All F.W. lines to have a self cleaning gradient, min. 1 in 40 to main drains. (if required) All junctions to have slow bends.
Trench to be as narrow as practical, & to be prepared with min. 100mm deep layer of pea gravel, gravel to be 10mm down with a compaction factor of less than 0.3.
Backfill around pipe & carefully compact up to a min. height level with the crown of the pipe. Backfilling should be done by hand until a cover of 300mm has been made.
where F.W. line runs under the external wall, pre-stressed concrete lintels to be installed over, min. gap around pipe/ 50mm filled with compressible material, & masked on both sides with rigid material in order to prevent the infestation of rodents. PROPOSED PIPE UNDER THE FLOOR SHOULD BE OF CONTINUOUS LENGTH, THUS NO JOINTS
UNDER FLOOR. Provide new inspection chamber/s as shown to BS 7158, 2001. min. sizes : if depth 600mm or less internal diameter min. 190mm, if between 600mm & 1.2m internal dia. 450mm.

ABOVE GROUND DRAINAGE

Where applicable wastes should generally be the following sizes:
Sink 40mm
Wash Hand Basin 32mm
Shower 50mm shower should also be used on a 150mm plinth with an access point to the trap
All traps should be 75mm deep seal, any runs of pipework that exceeds 1.7m should use anti-siphon re-sealing traps or air relief valves. Relying points must be provided at all changes of direction.
Wastes should be connected to S.V.P. in accordance with B.S.5492. Soil & vent pipes to be min. 110mm
PVC with cleaning access above ground/floor level. S.V.P. should be positioned on the outside of the building terminating min. 900mm above any window head within 3m capped with a PVC bottom sim. @ discharge through the roof space taken to ridge terminal vent.
If an air admittance valve is indicated in the drawing it must be Marley 'Durgo' or sim. approved, fitted above the flood level of the highest appliance connected to it. Also, it must be installed within the building where there is no risk of freezing & be accessible for inspection/testing installed to manufacturers instructions.
NOTE: Stacks should not be fitted with air admittance valves alone when the connecting drain is subject to surcharging or is fitted with an intercepting trap or discharging to a septic tank or cesspool, for this type of application there must be a separate stack venting to the external air.

STAIRCASE

(max. pitch 42 degree site back dimensions and style of staircase required with client prior to ordering)

Bolton and Paul stock flight code: STSTA timber staircase or similar width = 855, rise ffl to ffl = 2600, going = 258 (o/a length of stair = 2708) going = 223, rise = 200.
Clear headroom to be 2m measured vertically above pitch line. All treads to be level, if open risers, no gap to be greater than 100mm, handrail to be provided one side at between 900mm and 1000mm to top of handrail measured vertically above pitch line with no gap within guarding greater than 100mm. Handrails to landing to be min. 900mm high with balustrade to have no openings greater than 100mm and securely fitted to landing and capable of resisting at least the horizontal force given in BS6399: Part 1: 1996.

HEATING

BOILER

Oil fired hot water system controls to switch boiler off when no heat is required.
SEDBUK Rating to be to domestic heating compliance guide.
Details of boiler & appropriate commissioning certificate to be provided to L.A. Building Control.

RADIATORS & CONTROLS

Position of new radiators to be confirmed by client, each is to have T.R.V. &/also room thermostats.
Time Control to be provided to control the operating period of the system
Pipework located outside the building insulation should be wrapped in insulating material having a thermal conductivity @ 40°C, not exceeding 0.035W/m.K & thickness equal to the outside dia. of the pipe to a max. 40mm.

GLAZING TO EXTERNAL WINDOWS/DOORS

U value required for whole of window/door, i.e. frame (wood or P.V.C.) & glass of 1.6 W/m²/K with a 16mm air gap. To comply with & installed under the Approved Document L1 of the Building Regulations 2010
All new windows to provide Background Ventilation of at least 8000mm²

GLAZING TO CRITICAL LOCATIONS

Glazing between finished floor level and 800mm above that level, in internal & external walls, and porches, between finished floor levels and 1500mm above that level in a door or in a side panel close to either side of the door, should be safety glazing to BS 6206: 1981

PURGE VENTILATION

- For a hinged or pivot window, that opens 30° or more the height & width should be at least 1/20th of the floor area of the room
- For a hinged or pivot window that opens less than 30°, the height & width should be at least 1/40th of the floor area of the room

Background Ventilation for Habitable Rooms (room used for dwelling purposes but not solely a kitchen):
Rapid ventilation: 1/20th of floor area
Background ventilation: 8000mm² per room

ROOF CONSTRUCTION

Concrete interlocking tiles i.e. Sandstoft, Lafarge or sim. approved to suit roof pitches shown on drawing, min headlap 75mm installed to manufacturers instructions. All roofing tiles & accessories to be installed to B.S.5534: part1:1997, code of practise for slating & tiling. All valleys to be pre-formed GRP or sim. approved installed to manufacturers instructions, with all tiles to valleys cut straight to valley and bedded at verges. Provide undercladding nailed to rafter, & weather pointed tile over.
All lead work to be code 4 lead stepped flashings/soakers pointed into mortar joints of walls, mortar joints to be min. 150mm up well with cavity protected by cavity trays over flashing/soakers.
Softwood treated slating battens to annex E of B.S.5534 part1 1997 (check with tile manufacturers spec for battens size prior to ordering)

ROOF VENTILATION

To be provided by Tyvek or sim. approved breathable underlating/tiling felt laid strictly in accordance with manufacturers instructions, OR continuous 10mm slotted soffit vent strip with mesh infill & roiled formed eaves vents between rafters to provide 50mm clear airgap, OR over fascia ventilation system, high density black polypropylene 10mm strip ventilators, universal spacer tray, underlay support tray & bird comb filler to suit tile.
All above to comply with Approved Document C & B.S.5250:2002.

ROOF STRUCTURE

To be open plan trussed rafters (as shown on Section Details) to take above mentioned tiles to B.S.5268 part 3 1985, manufacturers (Walker Nene Truss Company (01945 562215) or sim. approved) truss calc's to be submitted to L.A. Building Control min. 28 days prior to installation.
Trusses to be @ min. 400mm ctrs. fixed to wallplate with truss clips & any other fixing's instructed by manufacturer, see manufacturers details regarding internal water tank & additional support members.
Stability bracing (wind bracing) to be min. 22mm x 100mm free of defects fixed with galvanised 65mm x 3.5mm nails (2No per fixing)
50mm x 100mm Wall plate to be bedded (min. 10mm mortar bed joint) on internal skin of cavity wall, strapped @ max.2m ctrs. galv. 30mm x 5mm x 1m metal anchor straps screwed to blockwork & nailed/screwed to wall plate.
At gable end install 30mm x 5mm x 1m galv. straps @ max 2m ctrs. over min. 3 No trusses with solid noggins between, built into inner skin of cavity wall
All roof work to be in accordance with Approved Document A, B.S.5534, B.S.5290.

SURFACE WATER DRAINAGE TO CONNECT TO EXISTING IF THIS IS NOT POSSIBLE FOLLOWING DETAILS APPLY:

Installed to Approved Document H gutters & RWP. To be Marley or sim. approved, match existing to be min. 68mm dia. or etc. as required. Rain water pipes to connect into reducer connected to 100mm dia. UPVC underground pipework with flexible joints to min. 1:80 gradient. Trench to be as narrow as practicable, bedded with min. 100mm layer of pea gravel (10mm down), which has a compaction factor less than 0.3. Backfill with same material to min. crown of pipe, all compaction should be done by hand until a coverage of min. 300mm has been achieved, thereafter compaction can be done with a mechanical compactor.
All surface water to be taken to soakaway/min. 60mm from nearest habitable part of building, construction of soakaway to be min. 1400mm loose brick filled to 300mm of ground level, with polythene cover & topsoil over.
Soakaway is subject to appropriate percolation test being undertaken in order to ensure permeability of soil. Percolation test should be done strictly in accordance with Approved Document H2, para.1.34 to 1.38.
Surface water outlets shall be designed to BRE Digest 365 Soakaway Design or CIRIA report 156

SMOKE DETECTORS

Provide mains operated self contained smoke alarms to BS.5446pt. to be installed in circulation areas within 7m of doors to high fire risk rooms and within 3m of bedroom doors. Where more than one alarm is installed they should be interconnected so that detection of smoke by any unit activates the alarm in others. At least one smoke alarm to be installed in each storey containing accommodation, all to be interconnected. Self contained alarms to be permanently wired to a separate fused circuit at the distribution board. Installation to conform to IEE wiring regulations. Positioning of smoke alarms should be not less than 300mm from any wall or light fitting, where wall mounted units are installed they are to be a height between 150mm and 300mm below the ceiling. Positioning of smoke alarms must facilitate routine maintenance occupants of the dwelling are to be provided with information on the use of the equipment and its maintenance.

ELECTRICS

Any new sockets/switches/lighting points & switches to be in accordance with Part M 2004 of the Building Regulations, quantities & positions to be agreed with client prior to commencement of work.
All electrical work to comply with Part P of the Regulations, & BS 7671: 2001.
Prior to any new electrical works being carried out, the EXISTING electrical system must be checked for adequacy to support the proposed, if to be found inappropriate/unsafe or sub standard, this must be rectified prior to any additions.
All electrical work must be design/installed & certified by a competent person, who is registered with an electrical self-certification scheme that has been authorised by the Secretary of State, this person is responsible for ensuring compliance with BS 7671: 2001, & all relevant Building Regulations. This same person should notify Local Authority Building Control PRIOR to covering up any new cables (1st fix stage) in order to receive the appropriate inspection, on completion of the electrical work the registered competent person must provide self-certification certificate to the client & a notice to that effect (or a copy of the certificate) to Local Authority Building Control, not more than 30 days after completion of that work.

INTERNAL LIGHTING (new builds & extensions)

All internal lighting should be installed in accordance to Approved Document L1b, which states: reasonable provision should be to provide in the area affected by building work, fixed energy efficient light fittings that number not less than the greater of:
a) one per 25m² of dwelling floor area (excluding garages) or part thereof; or
b) one per four fixed lighting fittings

EXTERNAL LIGHTING (new builds & extensions)

All external lighting to automatically switch off when there is sufficient daylight, & when not required at night, the lamp capacity must not exceed 150 watts per light fitting Applies to porches but not garages/carports.

OIL STORAGE TANK

Oil storage tank performance and installation to conform with Approved Document Part J section 5 of BR 2000 edition 1/5/2002. Installed in accordance with BS 799: Part 5
To be located in an unobtrusive position bearing in mind need for safety, filling, maintenance and constructed so it is reasonably protected from fires.
Resistant to physical damage and corrosion and designed to min. oil escape.
Incorporate secondary containment when risk of pollution.
Labelled with information on how to respond if leakage occurs.
Oil tank not exceeding 3500 litres positioned less than 1800mm from any part of a building, make oil walls impermeable excluding air b/wks. With at least 30 min. fire resistance and any eaves within 1800mm of tanks and extending 300mm beyond each side of tanks with non combustible cladding. Oil tanks less than 760mm from boundaries provide a fire wall between tank and boundary or a boundary wall having at least 30 min. fire resistance to fire on either side. The fire wall or boundary wall to extend at least 300mm higher and wider than the top and sides of the tank. Oil tank at least 1800mm from building and at least 760mm from boundary no further provisions necessary. See table 5.1 of Approved Document J.

KENDLE INTERIORS LTD
17 STAMFORD ROAD
MARKET DEERING
Lincs
PE6 8AB

Project:
PROPOSED

FULL REBUILD

Client: MR. D. KENDLE
RANDOM COTTAGE
BECK BANK
WEST PINCHBECK
SPALDING PE11 3QN

DRAWING:
SECTION A-A
SECTION DETAIL B
SPECIFICATION

DRAWING NO. 2 DATE JUNE 2015

Scale:
1:50 1:25