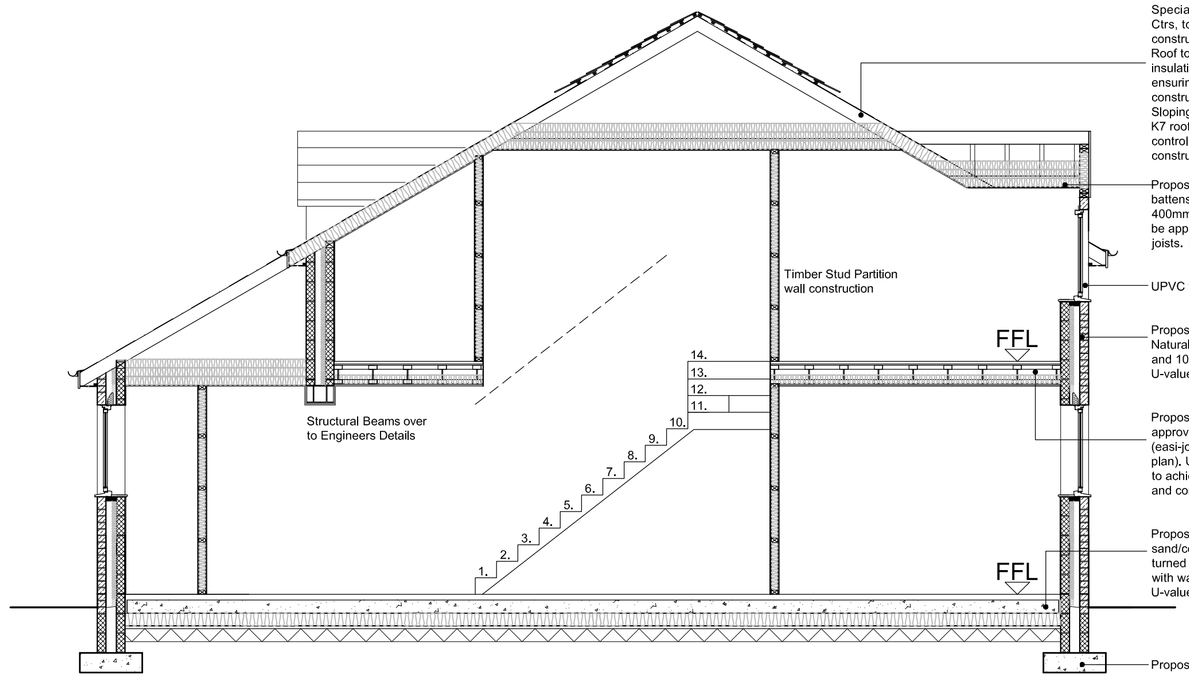


Proposed Roof to be constructed from Natural Slate, fixed to tanalised softwood roofing battens, over counter battens running in-line with trusses, a high performance, reinforced / microporous (breathable) roofing felt, over Specialist designed raised tie roof trusses. TRADA approved timber Roof trusses to be installed at 400mm Ctrs, to be manufactured, fixed and braced in accordance with manufactureres details. Roof to be constructed at a pitch of 30 degrees.
Roof to be insulated as a Ventilated 'Cold' Roof with 300mm Knauf Crown Loft Roll 44 / CarbonZero Roll roof insulation between (100mm) and over (200mm) at right angles to ceiling joists. The insulation is to be laid ensuring that the second layer is at right angles to the first with all the joints being close butted. Cold roof construction to achieve a minimum U-value of 0,15W/m²K.
Sloping parts of ceiling to be insulated as an Unventilated 'Warm' Roof by providing 150mm Kingspan Kooltherm K7 roof insulation (or similar and approved) in line with rafters between breathable roofing membrane and vapour control layer. Underside of rafters to be lined with 37.5mm Kingspan Kooltherm K17 Insulated Plasterboard. Roof construction to achieve a minimum U-value of 0,15W/m²K .

Proposed Dormer Roof(s) to be constructed from Natural Slate fixed to tanalised softwood 25 x 50mm roofing battens; a high performance, reinforced / microporous (breathable) roofing felt; over 47 x 100mm C16 Rafters at 400mm Ctrs, (max span 1900mm, - Trada Table 6.21.) : Roof(s) to be constructed at a pitch of 40 degrees. Ridge board to be appropriately sized to suit (50 x 150mm), A Ceiling to be provided to consist of 47 x 120mm softwood ceiling joists. Rafters/Trusses to be doubled up under dormer cheeks.

UPVC framed windows

Proposed External walls to be formed as a Cavity wall construction consisting of an outer leaf of 100mm thick Natural Stonework; 120mm cavity including 70mm Kingspan Kooltherm K108 insulation (or similar and approved) and 100mm dense Blockwork inner leaf, having 12mm plaster finish. Wall construction to achieve a minimum U-value of 0.18w/m2k.

Proposed Upper Floors to be constructed from 28mm thick screed board (as manufactured by JCW or similar and approved), laid over 15mm floor decking. Floor decking to be fixed to 97x215mm metal web type floor joists (easi-joist), spaced at 400mm Ctrs installed to manufacturers recommendations. (Span of joists as shown on plan). Underside of joists to be finished with 2No. layers of 15mm plasterboard and skim finish. Floor construction to achieve a minimum U-value of 0.22w/m2k. Floor finishes to each individual area to be agreed between client and contractor. Provide 100mm(min.) mineral wool acoustic quilt insulation within void.

Proposed Ground Floor construction to consist of 150mm thick solid concrete floor slab finished with 65mm sand/cement screed. Provide 150mm rigid Kingspan Kooltherm K3 insulation board below ground floor slab, turned up at edges to extend above line of wall insulation. 1200 guage polythene sheet DPM as C2 to be lapped with wall DPC, laid on sand blinding, on well compacted Hardcore. Floor construction to achieve a minimum U-value of 0.13 w/m2k.

Proposed Concrete Strip Foundations

# Section A-A

**For Proposed Plans and Elevations Refer to RAI/10 Dwg 04**

**Approved Document A - Structure**

**A1 Foundations**

1. Proposed Foundations to be concrete strips, minimum thickness of 225mm with projection of 150mm to either side of wall. Depth of strips to have nominal 600mm cover over normal sandy/gravel ground conditions. All work to be carried out to the satisfaction of the Local Authority Building Control Officer.

**A2 Floors**

1. Proposed Ground Floor construction to consist of 150mm thick solid concrete floor slab finished with 65mm sand/cement screed. Provide 150mm rigid Kingspan Kooltherm K3 insulation board below ground floor slab, turned up at edges to extend above line of wall insulation. 1200 guage polythene sheet DPM as C2 to be lapped with wall DPC, laid on sand blinding, on well compacted Hardcore. Floor construction to achieve a minimum U-value of 0,13 w/m2k.
2. Proposed Upper Floors to be constructed from 28mm thick screed board (as manufactured by JCW or similar and approved), laid over 15mm floor decking. Floor decking to be fixed to 97x215mm metal web type floor joists (easi-joist), spaced at 400mm Ctrs installed to manufacturers recommendations. (Span of joists as shown on plan). Underside of joists to be finished with 2No. layers of 15mm plasterboard and skim finish. Floor construction to achieve a minimum U-value of 0,22w/m2k. Floor finishes to each individual area to be agreed between client and contractor. Provide 100mm(min.) mineral wool acoustic quilt insulation within void.

**A3 External Walls**

1. Proposed External walls to be formed as a Cavity wall construction consisting of an outer leaf of 100mm thick Natural Stonework; 120mm cavity including 70mm Kingspan Kooltherm K108 insulation (or similar and approved) and 100mm dense Blockwork inner leaf, having 12mm plaster finish. Wall construction to achieve a minimum U-value of 0,18w/m2k.
2. Leaves to be tied together with stainless steel vertical twist wall safety ties to BS1243 in staggered formation at 450mm vertical (300mm at openings) and 750mm horizontal Ctrs. Lateral restraint provided by 50 x 1000mm Galv. steel straps.
3. Weak mix cavity fill provided to cavities 225mm(min.) below floor level.
4. All openings in cavity wall construction to be protected with horizontal DPC's, cavity trays, stop ends, weep holes and insulated DPC's as necessary.
5. Concrete Blockwork to have min. strength of 7N/mm and min. density 1400 Kg/m3.
6. Vertical movement joints should be provided to the outer leaf of a cavity wall as follows:

| Material | Normal spacing | Joint thickness |
|---|---|---|
| Clay brickwork | 12m (spacing up to 15m may be possible if sufficient restraint is provided – consult Designer) | 15mm |
| Calcium silicate and | 7.5m – 9m | 10mm |
| Concrete blockwork | 6m | 10mm |
| Stone | 12m | 15mm |

Note: It is not normally necessary to provide movement joints to the internal leaf of cavity walls but should be considered where rooms occur with unbroken lengths of wall in excess of 6m. The first joint from a return should be not more than half the dimension indicated in the table. Movement joints are not acceptable in solid party or separating walls; however where cavity wall construction is adopted, offset movement joints with a solid rubber compressible strip may be acceptable.

**A4 Internal Walls**

1. Non load bearing Partitions constructed from 75 x 50mm timber studs at 400mm Ctrs. with sole plates, head plates and noggins between studs as necessary. Timber stud partitions to be finished both sides with 12.5mm British Gypsum plasterboard (Gyproc wallboard) and skim both sides, with plasterboard of mass per unit area of not less than 10kg/m2. Include a minimum of 35mm thickness of Rockwool Acoustic slab between studs where necessary.
2. Party walls between properties to be constructed inline with Robust detail E-WM-17. Wall to consist of two structural blockwork walls (block density of 1350 -1600Kg/m3) separated by 100mm (min) cavity insulated with 100mm Isover RD party wall roll. Walls are to be finished with with one layer of 15mm Gyproc wall board (9.8Kg/m2) and skimmed. Party wall to continue to underside of roof construction to reduce sound transmission and reduce the possible spread of fire in the roof void. Leaves tied together with stainless steel (Type A) vertical twist wall safety ties to BS1243 in staggered formation

***Should the party walls be registered with Robust Details LTD and the above specification is followed without deviation no sound testing will be required to comply with the regulations set out in Document E (2004). Failure to register the walls prior to construction or get the walls inspected will automatically result in the requirement for airborne sound test to be undertaken by an accredited specialist ***

**A5 Lintels**

1. Generally insulated steel lintels over traditional cavity openings by Catnic or equal and approved.
2. Lintels over internal openings to be prestressed concrete lintels with 150mm min. end bearing, or timber frame lintels dependant on area of construction.

**A6 Roof**

1. Proposed Roof to be constructed from Natural Slate, fixed to tanalised softwood roofing battens, over counter battens running in-line with trusses, a high performance, reinforced / microporous (breathable) roofing felt, over Specialist designed raised tie roof trusses. TRADA approved timber Roof trusses to be installed at 400mm Ctrs, to be manufactured, fixed and braced in accordance with manufactureres details. Roof to be constructed at a pitch of 30 degrees.
2. Roof to be insulated as a Ventilated 'Cold' Roof with 300mm Knauf Crown Loft Roll 44 / CarbonZero Roll roof insulation between (100mm) and over (200mm) at right angles to ceiling joists. The insulation is to be laid ensuring that the second layer is at right angles to the first with all the joints being close butted. Cold roof construction to achieve a minimum U-value of 0.15W/m²K.
3. Sloping parts of ceiling to be insulated as an Unventilated 'Warm' Roof by providing 150mm Kingspan Kooltherm K7 roof insulation (or similar and approved) in line with rafters between breathable roofing membrane and vapour control layer. Underside of rafters to be lined with 37,5mm Kingspan Kooltherm K17 Insulated Plasterboard. Roof construction to achieve a minimum U-value of 0.15W/m²K .
4. Provide 100x75mm tanalised softwood wall plates strapped to inner leaf using 30x5mm galvanised mild steel straps at 1000mm Ctrs. Each rafter fixed to wall plate by means of proprietary galvanised mild steel clips.
5. Proposed Dormer Roof(s) to be constructed from Natural Slate fixed to tanalised softwood 25 x 50mm roofing battens; a high performance, reinforced / microporous (breathable) roofing felt; over 47 x 100mm C16 Rafters at 400mm Ctrs, (max span 1900mm, - Trada Table 6.21.) : Roof(s) to be constructed at a pitch of 40 degrees. Ridge board to be appropriately sized to suit (50 x 150mm), A Ceiling to be provided to consist of 47 x 120mm softwood ceiling joists. Rafters/Trusses to be doubled up under dormer cheeks.
6. Valleys of roof intersections to be formed with Code 5 lead over breather membrane on 19mm thick external grade ply valley boards with a min. girth of 225mm with tilting fillets to suit. Lead cover flashings to be Code 4 lead, joint laps min. 100mm, upstand min. 75mm with overlap min. 50mm. Step flashings to be of Code 4 lead, joint laps min. 100mm, to upstand min. 85mm.

**Dormer Specification**

*****Dormer Cheeks to be constructed of 100mm x 50mm softwood timber studs at max. 600mm vertical and horizontal Ctrs. External side of cheeks to be clad in a Black timber horizontal weatherboard fixed to 38x25mm timber battens, nailed onto sarking felt, fixed in turn onto 18mm external grade plywood over 6mm supalux board. Void between timber studs to be infilled with 90mm Kingspan insulation board. Internal surface of dormer walls to be lined with 500g visqueen vapour barrier and 25mm bonded plasterboard to give half hour fire resistance.**

**B - FIRE SAFETY**

**B1 Means of Escape**

1. All windows above ground floor level to be Emergency egress windows with a minimum. 450mm clear opening. 0.33sqm at max. 1100mm high.

**B2 Smoke Detection**

1. Provide a Grade C type LD 2 alarm system to BS5839-6, - System consisting of smoke detectors and sounders to all circulation spaces which form part of an escape route and/or areas at high risk of fire, connected to a common power supply comprising of mains and stand-by. System is to be fitted with a central control unit.
2. Detectors to ceiling to be a a maximum of 7.5mtrs away from any door to a habitable room connecting to the escape route, sensors should also be a minimum of 300mm away from walls and light fittings.
3. Provide Heat Detector within Kitchen/Dining Area.

**B3 Fire Doors**

1. Provide fire doors as referenced on floor plans.

**B4 Fire Protection**

1. All party walls are to extend to the underside of the roof covering to provide suitable fire compartmentation to prevent the spread of fire.
2. At the junction of the party wall / external wall the cavity should be protected by means of a fireproof cavity barrier such as a Rockwool Acoustic Party Wall DPC in order to prevent fire spread through the cavity.

**C - SITE PREPARATION AND RESISTANCE TO MOISTURE**

**C1 DPC's and Cavity Trays**

1. Provide 100-320mm Polythene DPC Type D min. 150mm min. above Ground Level.
2. All openings in cavity wall construction to be protected with horizontal/ Vertical DPC's, cavity trays (Type C manufactured by cavity tray ltd), stop ends, weep holes and insulated cavity closers (Type FWC manufactured by cavity tray ltd) as necessary.
3. Cavity trays above all openings, abutments to roofs, above chimneys and any detail where cavity is bridged.
4. Install cavity closer (e.g, Thermabate/12mm supalux board) and insulated DPC (e.g, Damcor) to the jambs of all openings in external walls

**C2 DPM**

1. Damp Proof Membrane and radon barrier to be 1200g Polythene laid below insulation and lapped and linked through external walls to DPC.

**C3 LEADWORK**

1. To wall and roof abutments provide Code 4 lead flashings and soakers stepped as necessary to link into cavity trays.
2. Provide Code 4 lead flashings to valleys of roof intersections.
3. At chimney penetration of roof provide Code 5 lead apron and cover flashings and soakers.

**C4 RADON**

1. Radon Barrier to be 1200 guage DPM visqueen membrane provided below insulation. All joints between membrane to be sealed. Where services pass through barrier, airtight seals must be provided in accordance with manufacturers instructions.

**E - ACOUSTIC RESISTANCE**

**E1 Walls**

1. Proposed Non load bearing partitions to be constructed from 75 x 50mm timber studs at 400mm Ctrs. with 12.5mm plasterboard and skim finish to both sides. Include a minimum thickness of 35mm Rockwool Acoustic slab between studs where necessary. - Wall to archive sound insulation Rw of 40dB
2. Party walls between properties to be constructed inline with Robust detail E-WM-17. Wall to consist of two structural blockwork walls (block density of 1350 -1600Kg/m3) separated by 100mm (min) cavity insulated with 100mm Isover RD party wall roll. Walls are to be finished with with one layer of 15mm Gyproc wall board (9.8Kg/m2) and skimmed. Party wall to continue to underside of roof construction to reduce sound transmission and reduce the possible spread of fire in the roof void. Leaves tied together with stainless steel (Type A) vertical twist wall safety ties to BS1243 in staggered formation

****Sample sound testing will be required before completion unless evidence is provided that each plot has been registered with Robust Details****

**F - MEANS OF VENTILATION**

**F1 Ventilation**

1. Extract ventilation to the outside is required in each Kitchen and Bathroom. The extract can either be intermittent or continously operating. The intermittent rate, and for continuous systems the minimum extract air flow rates at the highest and lowest settings, should be no less than specified in Table 5.1a of Approved Document F.
2. Kitchen to have Mechanical Extract ventilation of 30L/sec if adjacent to hob, or 60L/sec if elsewhere with 15 minute timer incorporating overrun facility or humistat.
3. Bathrooms to have Mechanical Extract ventilation of 15L/sec with 15 minute timer incorporating overrun facility.
4. The whole dwelling ventilation rate for the supply of air to habitable rooms in a dwelling should be no less than specified in Table 5.1b of Approved Document F. Whole dwelling ventilation rate required is 17L/second (based upon 2 bedrooms).
5. Purge ventilation provision is required in each habitable room and should be capable of extracting a minimum of four air changes per hour (ach) per room directly outside. Normally, openable windows or doors provide this function.
6. Proposed Means of Ventilation to each dwelling by Continuous Mechanical Extract (MEV) having provisions for extract and whole dwelling ventilation. This system could comprise either a central extract system or individual room fans (or combination of both). To ensure that the system provides the intended ventilation rate, measures should be taken to minimise likely wind effects when any extract terminal is located on the prevailing windward facade.

**F2 Condensation**

1. A suitable breathable felt, such as Tyvek (or similar and approved) to be used in conjunction of the proposed roof construction.
2. Ceilings to high humidity areas to be underdrawn with 12,5mm foiled back plasterboard.

**G - SANITATION, HOT WATER SAFETY AND WATER EFFICIENCY**

**G1 Cold Water Supply**

1. Wholesome water to the building is to be supplied by a statutory water undertaker or a licensed water supply company.
2. New installation is to comply with the requirements set out in the Water Supply (Water Fitting) Regulations 1999 (SI 1999/1148 as amended)

**G2 Water Efficiency**

1. The new installation is to adhere to the specification as set out by the designer in the 17K Water calculations. (see additional information provided - should these not be present contact the designer)

**G3 Hot Water Supply Systems**

1. All washbasins, bidets, baths, showers and sinks which provided in food preparation areas are to supplied with heated wholesome water.
2. The temperature of hot water baths is to be restricted by means of a thermostatic mixer so not to exceed 48°c .

**Note :** Prior to completion a notice is to be submitted to the Local Authority from a suitable qualified person within 5 days of final inspection declaring that the heating and hot water systems have been commissioned to ensure components and controls comply with the 17K Water Calculations and the Guidance set out in Part G (2010) & Part L1B (2010).

**H - DRAINAGE**

**Proposed Plans to be read in conjuction with Drainage Strategy as provided by Lees Roxburgh Consulting Engineers.**

**H1 Foul Drainage**

1. Provide 100mm diam. branch waste pipes for WC's, 50mm diam. for Baths/showers and sinks and 40mm diam. for Wash Hand Basins. All to have 75mm deep seal anti-syphonic traps and to connect to 100mm diam. Soil Vent Pipe.
2. All drains above ground to have adequate fall, ventilation and rodding facilities in accordance with relevant codes of practice, approved documents and manufacturers guidelines.
3. Provide a trapped gully for all storm water drainage connections and a back inlet gulley for all combined and foul water drainage connections. Waste appliances are to be taken to below the grid line but discharged above the water line.

**H2 Below Ground**

1. Location of Drains to be checked before commencement of works on site and all drains to be laid to Local Authority Building Inspectors Approval.
2. It has been noted that there is an Existing Foul system on site which drains to a private pumping station which flows are pumped up to the United Utilities public sewer system in Lower Lane.
3. Proposed drainage to be on a separate system, with only foul drainage connected into the foul sewer. Surface water should be separated and laid to the existing surface water sewer/water coarse.
3. Foul drainage connections to be 100mm (min.) diam. Vitrified clay drains by 'Hepworth Supersleve' or equal and approved to be laid to min. 1:80 gradient to new inspection chambers, eventually leading to mains drains.
4. Drains bedded and surrounded by pea gravel and lintelled over when passing through walls. Pipes passing through walls to be protected by 150x100mm R.C lintels fitted to support wall above, provide cement fibre sheet collars to either side of the wall to maintain an air gap around the pipe. Min. 1200mm beneath vehicular access ways and 500mm beneath garden and paved areas. Excavations for drains to the satisfaction of the Local Authority Building Control Officer.
5. New inspection chambers less than 1.2m deep are to be clayware or pre-formed polypropylene inspection chambers as appropriate. Polypropylene chambers can be used up to 3.0m deep but require max 350mm diam. reduced cover to prevent man entry. Manhole chambers are to be of precast concrete construction with 150mm insitu concrete surround. Inspection chamber sizes are to be in accordance with table 8 of BS8301.
6. Excavations for drains to the satisfaction of the Local Authority Building Control Inspector.
7. Great care must be taken when during excavation of foundations and drainage runs, in respect of existing services. Contact utility companies if in doubt.

**H3 Rainwater Drainage**

1. Rainwater to discharge via 110mm half-round UPVC gutters with 75mm diam. RWP's to BIG connected to 100mm diam. drains as described above. Pipework as H2, vertical BIG's with rodding access installed to manufacturers recommendations complete with seal plates and grilles. All surface water to be rodable. Surface water to connect into the existing boundary ditch watercoarse system. Based upon the impermeable area within the development boundary, it is considered that a flow restriction will not need to be incorporated into the detailed design.

**J - HEAT PRODUCING APPLIANCES**

**J1 Space Heating**

1. Primary source for space heating will be provided by the means of a new gas fired Combi Boiler with a Sedbuk rating of "A" (90-91.3% efficiency) to comply with Part 'L' of the Building Regulations. Position to be agreed with manufacturer and client.
2. Space heating radiators with thermostatic control valves to be fixed within each room to Client's requirements.
3. Hot water to be supplied by the fore mentioned Combi Boiler.
4. Secondary heating to be provided by a modern gas fire to be installed within Lounge Area having Class 1 Flu.

**J2 Chimneys and Flues**

1. A chimney system is to be constructed on the gable elevation of the dwelling as shown on plan, to manufacturers guidelines. The Scheidel Chimney Concept system (or similar and approved) involves a modular 3-layer insulated chimney system, The first layer is a high quality flue liner, made of fireclay, tested to EN1457. The second layer is a flexible insulation board designed to maintain the temperature of the flue gases and allow them to pass freely up the chimney. The third layer is a lightweight chimney block which safely encases the whole system and provides additional insulation.
2. Chimney to be clay lined to BS1181 with min. 200mm diam. or equivalent square section to rise vertically, 200mm deep masonry chimney built to surround flue liner, corbelling over max. 300mm to terminate min. 1800mm above weather surface at the roof eaves. Lead flashing and saddle tray at roof breakout point. Concrete Coping to top of chimney with stainless steel expansion plate to facilitate vertical expansion and rear ventilation. Bend kits are available allowing the flue to be moved within the chimney breast.
3. A notice plate is to be affixed within the dwelling in regards to the flue installation and hearth in accordance with Part J and to indicate what generic types of appliance can be accommodated with the type of flue installed.

**J3 Protection of Building**

1. A constructional hearth should be made of solid, non-combustible material such as concrete at least 125mm thick underneath fire place and project min. 500mm from back of fire place.

No combustible material should be placed underneath a constructional hearth unless there is an air space of 50mm or more or the combustible material is at least 250mm below the top of the hearth. A finished/decorative hearth should be at least 12mm thick and made of non-combustible material or tiles.

**Fireplace Recess**

The throat lintel/gather unit is a structural lintel to form the fireplace recess and gather into the flue and support the flue liner. The size of the fireplace opening required determines the flue liner size needed. For example, a 200mm diam. flue, a 600mm span lintel will be required, 375mm deep recess with the height and width being 500mm. (refer to manufacturer for further details).

**J4 Combustion Air**

1. An appliance needs a permanent open air supply for the flue to operate properly. Any room containing a decorative fuel effect fire should have permanent open air vents. Fires in a fire place with a throat, the air vent free area should be at least 10,000sqmm. Decorative fuel effect fires with no throat, such as under a canopy, the air vent free space should be at least 50% of the cross section area of the flue. Opened flued appliances, ventilation is to be provided via permanent fixed air bricks to each side of fire place to achieve min. 500sqmm free ventilation area or as determined by manufacturer.

**J5 Upon Completion of Installation**

1. Permanent and robust information notice plates to be fixed next to electricity consumer unit or other suitable obvious location.

**K - PROTECTION AGAINST FALLING, COLLISION AND IMPACT**

**K1 Internal Staircase**

1. Proposed Ground Floor timber staircase(s) to have 14No. risers of 191,85mm with a total rise of 2686mm and goings of 245mm. Minimum headroom of 2000mm to be maintained above pitch of stair, handrail to be provided to be fixed at a height of 900mm above pitch line and 1100mm above landings. Spacing between vertical balustrades to prevent the passage of a 100mm diam. sphere. Staircase to be constructed at a width of 900mm. The going of tapered treads should measure at least 50mm at the narrowest end. Contractor to check all dimensions on site prior to ordering staircase.

**K5 Protection against Impact with glazing**

**Glazing**

1. All glazing to doors and glazed screens within 300mm of doors and up to 1500mm above FFL, and windows with cills below 800mm above finished floor to be fitted with toughened or laminated safety glazing to BS6206.

**L - CONSERVATION OF FUEL & POWER**

**L1 Floors**

1. Ground Floor - Proposed Ground Floor construction to include 150mm rigid Kingspan Kooltherm K3 insulation board (or similar and approved). Floor construction to achieve a minimum U-value of 0,13w/m2k.

**L2 Walls**

1. External Walls - Proposed Cavity wall construction to include 70mm Kingspan Kooltherm K108 insulation (or similar and approved). Internally the wall is the be finished with 12.5mm lightweight plasterboard on dabs and skimmed. Wall construction to achieve a minmum U-value of 0.18w/m2k.
2. Separating Wall between units - 100m Isover RD party wall roll to achieve a U-value of 0.17w/m2k.(Limiting U-Valve - 0.20w/m2k - Part L1A 2010, Table 2)

**L3 Roof**

1. Cold roof construction to include 300mm Knauf Crown Loft Roll 44 / CarbonZero Roll roof insulation between (100mm) and over (200mm) truss joists., to achieve a minimum U-value of 0.15w/m2k.
2. Sloping parts of ceiling to be insulated as an Unventilated 'Warm' Roof by providing 150mm Kingspan Kooltherm K7 roof insulation (or similar and approved) in line with rafters between breathable roofing membrane and vapour control layer. Underside of rafters to be lined with 37.5mm Kingspan Kooltherm K17 Insulated Plasterboard. Roof construction to achieve a minimum U-value of 0.15W/m²K .

**L4 Windows / Doors**

1. UPVC framed window systems to be 26mm double glazed units, fitted with Pilkington Argon filled 'K' low E glass with warm edge spacers, which have a minimum Window Energy Rating (WER) of 'C' or achieve a maximum U-value of 1.6w/m2k. (Min Requirement - 2.00w/m2k - Part L1A 2010, Table 2)
2. UPVC framed door systems to be insulated and achieve a U value of 1.8w/m2k. (Min Requirement - 0.18w/m2k - Part L1A 2010, Table 2)

**L5 Lighting**

1. Provide energy efficient light fittings to rooms and hallways with a circuit luminous efficiency greater than 40 lumen per circuit-watt. – (A minimum of 6No. should be provided within each dwelling.)
2. All external lights are to be fitted with sensors.

**L6 Heating**

1. Heating and hot water system and controls to be fitted in accordance with the Domestic Heating Compliance Guide
2. Prior to completion a notice is to be submitted to the Local Authority from a suitable qualified person declairing that the heating and hot water systems have been commissioned to ensure components and controls comply with the 17K Water Calculations and the Guidance set out in Part G (2010) & Part L1B (2010).

**L7 Air Permeability**

1. Air Permeability of 5.00m³/h.m² @ 50PA - (dwellings require testing upon completion and must achieve this value).

**L8 Energy Performance**

1. Upon completion each property is to be issued with an Energy Performance Certificate which should be fixed in the property providing its energy rating for future in habitants. A copy of the Certificates are to be deposited with the council a minimum of 5 days prior to final inspection.

**M - ACCESS FOR DISABLED**

**M1 Access**

1. Main Entrance to dwelling to have a level threshold or a ramped approach at a gradient no greater than 1;12 with a landing of 1200mm x 1200mm (min) every 5mtr.and to be suitably accessible as per Approved Document M guidance. The ramps should be 900mm wide (min) and have a have a firm surface
2. Main Entrance door and ground floor WC to have 800mm clear opening.
3. Ground Floor WC to be disabled compatible with 750sqmm maneuvering space and have a 750mm clear opening consistent with Table 4 of the approved document Part M 2004.
4. All light switches and sockets are to be minimum 450mm and maximum 1200mm above floor level.

**P - ELECTRICAL INSTALLATION**

**P1 ELECTRICS**

1. All Electrical work required to meet the requirements of Building Regulations Part 'P' must be designed, installed, tested and inspected by a person competent to do so (NICEIC registered). Prior to completion all BS 7671 Electrical Installation Certificate issued for the works are to be deposited with the council a minimum of 5 days prior to final inspection.

**Q - SECURITY WITHIN DWELLINGS**

1. Windows and doorways, any part of which is within 2m vertically of an accessible level surface, to comply with PAS 24;2012.

**R - PHYSICAL INFRASTRUCTURE FOR HIGH SPEED ELECTRONIC COMMUNICATIONS NETWORK**

**IN-BUILDING PHYSICAL INFRASTRUCTURE**

1. Building works must be carried out so as to ensure that the building is equipped with a high speed ready in building physical infrastructure, up to a network termination point for high speed electronic communications networks.
2. Where the work concerns a building containing more than one dwelling, the work must be carried out so as to ensure that the building is equipped in addition with a common access point for high speed electronic communications networks.

**Notes:**

All work is to be carried out to the latest current British standards Codes of Practice and recognised working practices.

All work and materials should comply with Health and Safety legislation and to be approved by the Local Authority Planning / Building Control Officer.

All dimensions are in millimetres unless where explicitly shown otherwise.

The contractor should check and clarify all dimensions as work proceeds and notify the design team of any discrepancies.

Do not scale off the drawings, if in doubt ask.

Avalon Chartered Town Planning are not liable for work undertaken prior to Full Planning Consent and/or Building Regulations Approval


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## PROPOSED SECTION AND DETAILS

**Site:** Lower Moss Farm, Lower Lane, Longridge

**Client:** Mr Rainford

**Date:** 27.07.20 **Scale:** 1:50 @ A1

**Project No:** RAI/10 Dwg 13 **Drawn:** DS

**Amendments:**