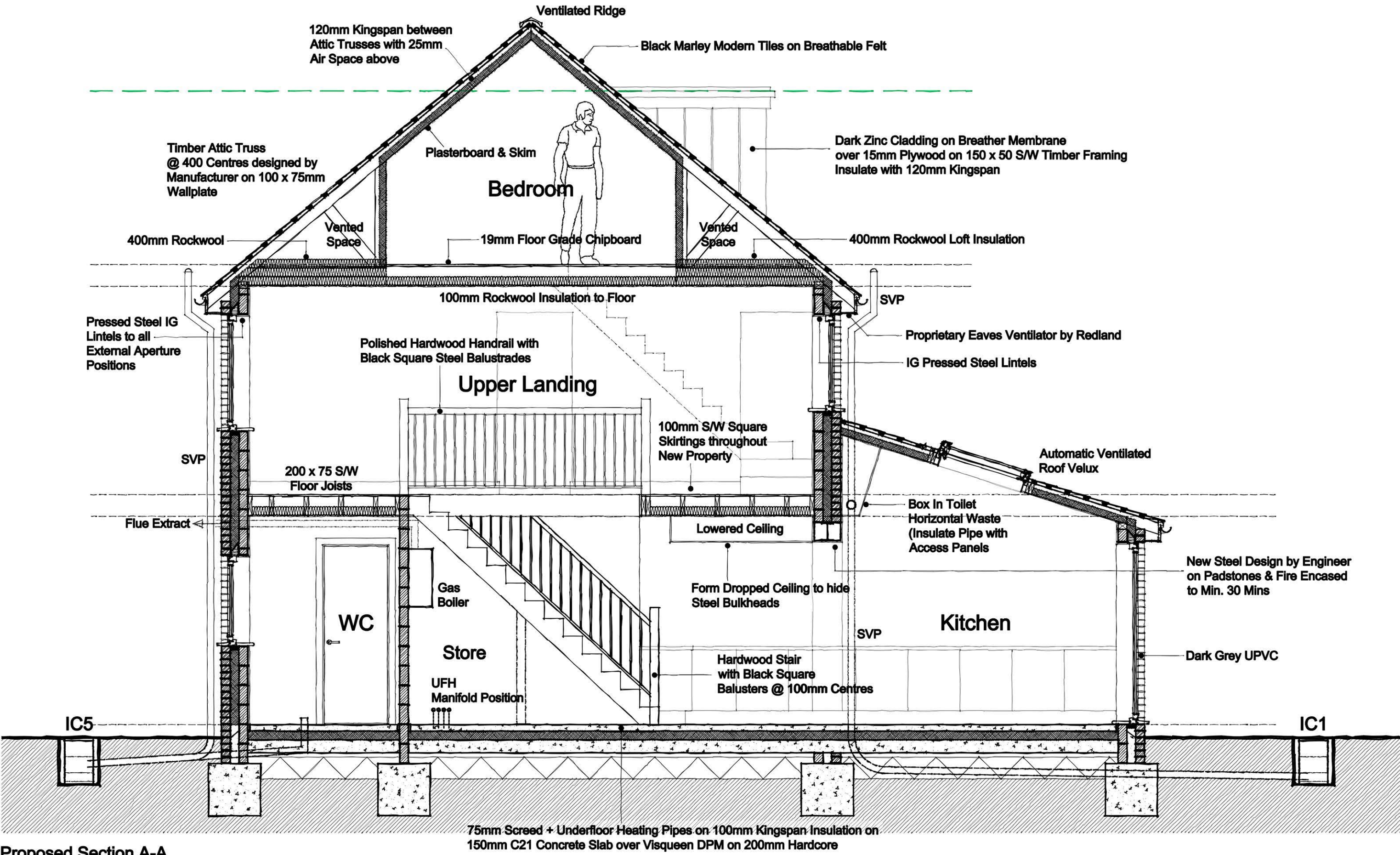




Proposed Section A-A
NTS

PART A - STRUCTURE
Provide all structural engineers details and calculations for the superstructure.Manufacturers details and calculations for the roof trusses should be provided.

PART B - FIRE SAFETYAll first-floor habitable rooms (floors no higher than 4.5m above external ground level) should have an emergency egress window.Emergency egress windows should have a clear openable area of at least 0.33m²; no dimension in height or width of the openable area less than 450mm; the bottom of the openable area should be no higher than 1.1m AFFL.For a dwelling of 3 storey, the stair enclosure should be treated as a protected stair, 30 minutes fire resistance to the enclosure, with all doors leading onto the stair (excluding bathrooms) to be fire doors (FD20 standard) leading to a final exit.Should the proposed design be an open plan scenario, then a residential sprinkler system to BS 9251 should be installed as a compensatory feature and agreed with Building Control.There should be a mains wired and interlinked fire alarm and detection system to BS 5839-6 (Grade D2, Category LD3). This should comprise of smoke detectors within the circulation space on each storey no more than 7.5m from the door to every habitable room and a heat detector in the kitchen and a smoke detector in the principal habitable room (i.e. living room). In 'Large Dwelling Houses' of not more than two storeys the system should be to BS5839-6 (Grade A, Category LD3) and 'Large Dwellings' of three or more stories should be to BS5839-6 (Grade A, Category LD2).

PART E - RESISTANCE TO THE PASSAGE OF SOUNDInternal walls between bedrooms and other rooms, including a WC should achieve a 40 dB rating. Typically a stud wall with timber studs of at least 75mm x 45mm. Include a layer of mineral wool (minimum 75mm thick with a minimum density of 10Kg/m³) placed in between the studs; and a single layer of plasterboard either side minimum density per unit area of 10Kg/m².

PART F - VENTILATION System 1: Background ventilators (trickle vents) with intermittent extract should be provided in accordance with Table 5.2a. The overall amount of background ventilation depends on the number of rooms and the size of the dwelling. Intermittent mechanical extract should be provided with the following minimum extract rate: kitchen 30 l/s above the hob, 60 l/s where remote from the hob; 15 l/s for bathrooms/showers; and 6 l/s for WC's. Extracts in rooms with windowless accommodation should have a 15 minute overrun. Extracts should discharge to external air (NB: recirculating fans are not classed as extract). Purge ventilation should be provided to each habitable room via windows with an opening of at least 5% of the floor area.

PART G - SANITATION, HOT WATER SAFETY AND WATER EFFICIENCYPlumbing Contractor to provide water efficiency calculations demonstrating no more than 125 litres per person per day for each dwelling (unless 110 litres/person/day has been specified by planning). The calculation should be in accordance with the methodology set out in the document Water Efficiency Calculator for New Dwellings (BRE Global Ltd 2009).

PART H - DRAINAGE AND WASTE DISPOSALSurface water drainage should, where practicable, run to a soakaway - soakaways should be positioned at least 5m from any building or road. Where this cannot be achieved, surface water should be connected to some form of suitable drainage, surface water should not be connected to septic tanks. Existing surface water drainage maintained and reused on existing property.

PART J - COMBUSTION APPLIANCES AND FUEL STORAGE SYSTEMSAny new solid fuel appliance (wood burner) should be installed by a competent person taking into account the necessary size/type of fuel/hearth/combustibility of surrounding construction and permanent ventilation for the appliance. It is recommended that a HETAS installer is used. If no certification is to be provided please forward details of the solid fuel installation to show compliance with Approved Document J including flue classification and size, hearth size, ventilation provision and carbon monoxide detector.

PART K - PROTECTION FROM FALLING, COLLISION AND IMPACTNew stair design minimum clear head height of 2m throughout the stair - this should be measured from the pitch line. The minimum rise of the steps should be 150mm, the maximum rise should be 220mm. The minimum going should be 220mm, the maximum going should be 300mm. The pitch of the stair must not exceed 42 degrees. Glazing in critical locations should be designed to break safe, safe breakage is defined in BS EN 12600 and BS 6206. Critical locations include glazing below 800mm AFFL; glazing below 1500mm within doors and glazing below 1500mm within 300mm adjacent to door openings should be designed to break safe. See diagram 5.1 of AD K. Juliet or other external balcony guarding should have a minimum height of 1.1m AFFL; be non-climbable and have gaps <100mm. Balcony guarding should be capable of resisting the minimum loadings from BS 6180.

PART L - CONSERVATION OF FUEL AND POWERA SAP calculation from an energy consultant will be required to demonstrate compliance with Approved Document L1a. The proposed dwelling must have a dwelling emission rate (DER) which is no greater than target emission rate (TER). Additionally, the dwelling fabric energy efficiency rate must not be greater than the target fabric energy efficiency rate.

PART M - ACCESS TO AND USE OF BUILDINGSCategory 1 dwellings (unless otherwise specified by planning) should have:A level (accessible) threshold to the principle entrance or alternative entrance where the approach route is not to the principal private entrance. On steeply sloping plots a stepped approach is acceptable. to the principle entrance or alternative entrance where the approach route is not to the principal private entrance. On steeply sloping plots a stepped approach is acceptable.

PART P - ELECTRICAL SAFETYSwitches and sockets should be positioned between 450-1200mm AFFL - consumer units should be mounted so that the switches are between 1350-1450mm AFFL. The principal entrance should have a minimum 'clear opening' width of at least 800mm.

PART Q - UNAUTHORISED ACCESSAll easily accessible door sets which provide access to a dwelling (including garage door sets) should be secure door sets - secure door sets should either meet PAS 24:2012 or another equivalent standard. The main doors for entering a dwelling (usually the front door) should have a door viewer or clear glazing either within the door or adjacent to the door to enable vision of callers. The same door set should also have a door chain or door limiter. All easily accessible windows, such as those on the ground floor, should be secure windows. Secure windows should meet PAS 24:2012 or an equivalent standard.

PART R - PHYSICAL INFRASTRUCTURE FOR HIGH SPEED ELECTRONIC COMMUNICATIONS NETWORKSEach dwelling should have at least one network termination point. Suitable ducting should be provided to connect the network termination point to an appropriate access point. The access point should be located externally with a through-wall duct to connect it to the network termination point.

REGULATION 7 - MATERIAL AND WORKMANSHIPMaterials should comply with the appropriate British Standards or Agreement Certificates. Alternatively, the materials should be marked, stamped, independently certified or otherwise justified by test or regulation to show their suitability. Standards of workmanship should meet the relevant BS 8000 series.

COMMISSIONING, CERTIFICATION AND INFORMATION PROVISIONAn 'as built' SAP calculation is required for each apartment to show that the Target Emission Rate is greater than the Dwelling Emission Rate as constructed. The calculation should also show that the Target Fabric Energy Efficiency is greater than the Dwelling Fabric Energy Efficiency). The calculations should include any changes to the specification during constructed and the assessed air permeability.An Energy Performance Certificate (EPC) is required for the dwelling on completion including Air Test.An appropriate BS 7671 electrical installation certificate will be required from an electrician registered with a recognised trade body such as NICEIC or NAPIT.An installation certificate is required for the new gas appliance and provided by a registered Gas Safe Contractor.

General Notes

- All works to comply with current Building Regs, codes of practices, British Standards whether or not expressed on this drawing.
- All services to be installed in strict accordance with the relevant statutory authorities recommendations and bye laws etc.
- Extent of site locally to proposed development to be cleared and the surface stripped back min 150mm to leave a clean level site, free from vegetable and other deleterious matter.
- All Existing services to the proposed site to be terminated prior to commencement of works.

Specification

Foundations & Slab

- All foundations are to be mass concrete trench fill to a minimum depth of 1.0m and approved by the local building control officer. All concrete shall be of a minimum strength of C25.
- Proposed ground floor slab to be 150mm thick concrete slab of minimum strength C25 (25 N/mm²) poured over separating layer of building paper, Grade B1F or polythene sheet (not less than 125 micron / 500 gauge) laid over 100mm Kingspan Floor Insulation laid on 1200 gauge visqueen DPM on 50mm sand blinding on 250mm layers of compacted hardcore. Cavity fill to stop 225mm below DPC.

Walls

- All external walls to be built off mass concrete foundations, foundation brickwork built up to slab level using good quality concrete commons and all cavities to be filled up to external ground level only using weak concrete fill sloping to the outside.
- External walls to be 300mm Cavity Construction using Block Outer Skin with 100mm Cavity Full Filled with Dri-Therm Insulation. 100m Concrete Block Inner Face Dry Lined with Plasterboard and Skim Finish
- Mortar joints are to be fully filled and to be weatherstruck as work proceeds. Exposure of brickwork to wind driven rain is 'severe'.
- Cavity trays to be used in new cavity walls where there are changes of direction of a cavity tray, e.g. stop ends, changes of levels and corners. The units should be installed in accordance with British Standards Codes of Practice for damp and water proofing. All flexible damp proof course, flexible sheet cavity trays and pre-formed cavity trays to be: ZEDUX CPT High Performance DPC and ZEDUX CPT Pre-Formed Cavity Trays manufactured by Visqueen Building Products, Zedcor Business Park, Bridge Street, Witney, Oxfordshire, OX8 6LJ, United Kingdom. (Telephone: 01993 776346 Fax: 01993 776233).
- Weep-holes to be installed at nominal 450 centres above all cavity tray and damp proof courses with a minimum of 2 weep-holes over each opening.
- Use stainless steel wall ties only to external wall positions at 900mm horizontal centres and 450mm vertical centres. Type 'A' ties are to be used only in separating walls or external walls with cavities of 50-75mm width. Type 'B' ties are to be used in all other external wall cavity situations. Ties to be Ancon Building Products, President's Way, President Park, Sheffield S4 7UR. (Telephone 0114 275 5224 Fax: 0114 276 8543).
- Provide 100mm Thermabate insulated cavity closures at external reveal positions.
- Lintel over openings to be pressed steel 'catnic', ensure a stepped and closed damp proof course is installed above all new lintel positions.
- Dry line external walls throughout with 12.5mm thick Gyproc Wallboards tapered edge, on adhesive dabs, with skim finish.
- 100x50mm timber stud wall with 1 no. layer of 12.5mm wallboard fixed to both sides of stud wall with skim finish. Full fill acoustic quilt friction fitted between studs.
- All studwork to wet areas to be constructed as Note 12 except with both sides plated with 18mm marine grade plywood, with a tile finish. Tile specification to be agreed.
- Walls to first floor to be built off double joist construction installed in accordance with manufacturers recommendations.
- Install damp proof course at a minimum 150mm above ground level ensuring dpc is fully lapped and bonded with damp proof membrane
- All walls including those to wet rooms to that abut a protected hall will maintain 30 minutes fire protection.
- All elements of structure to have 30 minutes fire resistance.

Intermediate Floors

- Floor build up to be: Hush-Felt 25 Resilient Strip stapled to the top of joists with 22 tongue and groove chipboard floor glued above using Hush-Bond, with all perimeters sealed using Hush-Seal 20. Timber floor joists to S.E.s design and detail. 100mm rockwool insulation to be laid in floor void. 1 No. layers of 12.5mm wallboard fixed to u/s of floor joists with skim finish

Roof

- Wall plate; strap all proposed wall plate with steel 'bat' straps at 1200mm centres, use plug and screws only.
- Form roof, tiles to be laid on 25x38mm SW tanalised battens (1 nail per every fifth course)on untearable roofing felt. Attic roof truss design and calculations to be supplied by approved truss manufacturer.
- All new fascias, Barge and Soffit Boarding to be ex. 32mm tanalised softwood, knotted and stopped, primed and decorated (Black UPVC Clipped Fascia Boards acceptable).
- Roof Tiles to be laid to pitch with 75mm headlap, minimum gauge 210mm, maximum gauge 225mm, battens 50x25mm (Black Marley Modern or Redland equivalent).
- Redland Red Vent Eaves Ventilation system and Ambi-Dry Verge system. Monarflex Eaves Guard to be dressed into the gutter and lapped by the first run of Monarperm 450 breather membrane.

Electrical

- Mains operated smoke & heat detection to be as shown and must be installed and inspected by an approved electrical engineer NIC EIC.
- Switches and socket outlets for lighting and other equipment in habitable rooms to be placed at appropriate heights between 450mm and 1200mm from finished floor level for disabled users. To be in full accordance with Document M of the Building Regulations.
- All wall lighting is to be operated by individual pull chords or switches mounted adjacent to fitting. Specification to be agreed.
- Provide mechanical extract to kitchen via oven extract hood, to achieve 30 litres per second and 4000 mm² background ventilation
- Provide mechanical extract to bathroom & en-suite, to achieve 30 litres per second, 4000 mm² background ventilation and to operate from light switch with 15 minute overrun.
- All sockets and switches countersunk on 60min or 30min walls must look to maintain the relevant fire integrity - intumescent pads or similar approved to be used.

Structural Elements

- Structural calculations and details to be submitted.
- Structural steelwork and metal work to be thoroughly clean and free from scale, dust and rust. Where not embedded in concrete it shall have one coat of red oxide paint immediately before fixing.
- Where steelwork members bear onto concrete pad stones, refer to structural engineers design and calculations.

General

- All timbers to be marked KD or dry.
- All electric, gas & water meters are to be mounted either outside or on the site boundary, installed to the associated utilities body guidelines.

- Hips formed with Redland Dry Hip system, ridges with Redland Dry Vent Ridge system.
- All Redland systems and Monarflex products to be installed in strict accordance with the manufacturer's recommendations.
- Valley gutters formed in Code 4 lead laid and dressed in lengths not exceeding 1.5m on 300mm wide timber support boards, laid between the rafters and sheathed in 4mm ply between tilting fillets. Finish the valley at the ridge with a lead saddle and dress the valley into the gutter at the eaves.
- Side abutments to walls formed with Code 4 lead step and cover flashing turned into brickwork under the cavity tray. Lead to dress over the slate by not less than 150mm. The ends of all tile battens must be supported on a rafter or similar. Install Dovetail GRP secret gutter under flashing. At eaves level, a secret lead gutter outlet is to be provided to allow discharge over fascia. The free edge of the lead flashing is to be secured with copper clips.
- Roofs to be felted with a Monarflex Two untearable felt, with battens fixed using tanalised battens only then fix roof tiles, all in accordance with manufacturer's recommendations.
- Roof Tiles (Colour: TBC) fixed to Treated SW Battens on Breather Membrane (Tyvek or similar approved) fixed to Timber Rafters to Manufacturers Design. 100mm Kingspan Insulation to be laid in Rafter Void with 62.5mm (50mm Insulation + 12.5mm Plasterboard) Kingspan Thermal Board to underside. Ensure 50mm Ventilation between insulation and top of Rafters to agreement of Building Control.
- Build-Up to achieve minimum 0.18 U-Value.
- Install hunter ogee or squareline u.p.v.c. black guttering and downpipes over hepworth rainwater roddable gullies.

Stairs, ramps, landings and balconies

- Level approach to entrance at ground level formed with ramps no greater than 10m in length or rise of 500mm.
- Width of ramp to be minimum 1.5m between walls, upstands or kerbs.
- Landings to top and bottom of ramp to be minimum 1.2m long and clear of any door swings.
- Surface of ramps and landings to be slip resistant and handrails are to be provided to both sides.
- Handrails stairs and ramps to be minimum 900mm above gradient of flight and 1100mm above landing and to extend 300mm beyond the top and bottom of the flight. Diameter of handrail to be maximum 45mm and formed in hardwood with ends curved to wall surfaces to prevent risk of catching clothing. Handrails to be minimum 60mm from adjacent wall surface.
- Headroom to be minimum 2000mm above pitch line of staircase
- Proprietary Juliet balcony guarding to be minimum of 1100mm above FF Level. Galvanised steel with PPC finish. Vertical balustrade with max 99mm space between.

Drainage & Plumbing

- All new below ground drainage for Foul and Surface water to be Hepsleve 100 as manufactured and supplied by Hepworth Drainage, Hazlehead, Crow Edge, Sheffield S36 4HG Tel 01226 763561. All below ground drainage to comply with BS EN 295-1: 1991: Vitrified clay pipes and fittings and pipe joints for drains and sewers and to satisfy the relevant requirements of The Building Regulations (and DOE Approved Document H1: sanitary pipe work and drainage). Installation of private drains and sewers should conform to BS EN 752 "Drains and Sewer Systems outside buildings", BS EN 1610 "construction and testing of drains and sewers" and part H of the building regulations. Adoptable sewers should be installed in accordance with the current edition of the "Sewers for Adoption" manual and the relevant Water Company Addendum. A test for watertightness using the air or water test should be applied immediately after the system has been installed, before any backfilling. Flush out the whole of the system with water to remove any silt and debris before final tests are applied again after backfilling is complete. All below ground drains should be laid to falls as specified by the manufacturer and installed in full accordance with the manufacturers recommendations. All below ground drainage under building or within 1.0m of building is to be encased in a minimum of 150 mm Concrete surround (min strength C20P). A flexible joint should be inserted at the end of each coupling joint of minimum thickness 18 mm, which should extend to the edge of the encasement, where pipes are laid beneath concrete slabs they may be cast-in monolithically in a local thickening of the slab without the need for flexible boards. A flexible coupling joint should always be placed within 150 mm of the face of any concrete with a further joint no more than 600 mm away, where pipes emerge into flexible bedding. All drains to be laid at falls of 1:40
- All points of discharge are to be fitted with removable water seal traps as set out in the Building Regulations: 32mm diameter traps for washbasins with 75mm depth of seal, 40mm diameter trap for showers, sink units and washing machine outlets each with 50mm depth of seal, and 75mm diameter traps for WC pans with outlet less than 80mm (100mm for those with outlets greater than 80mm) and 50mm depth of seal.
- Branch discharge pipes are to be installed in accordance with the requirements of Part H of the Building Regulations.
- Proposed SVP to be ventilated to the outside air. SVP to finish at least 900mm above any opening into the building
- Any internal SVP's should be finished with a proprietary ventilation tile as manufactured by Redland.
- Branch pipes are to discharge into another branch pipe or discharge stack in such a manner that prevents cross-flow into any other branch pipe.
- All foul water and surface water drainage to be connected to local authority mains system.
- All pipes passing through foundations walls to be protected by 75mm Deep P.C. Intels over drains passing under floor slab. Precast concrete lintel to give 50mm clearance for drainage pipes passing through external wall Drain to be encased in a minimum of 150 mm Concrete surround (min strength C20P). Mask opening both sides with rigid sheet material to prevent entry of fill or vermin.
- Soil and Foul waste to B.S.5572 110mm Dia U.P.V.C. SVP
- All services passing through separating floors to be insulated in full accordance with Approved Document E and Robust Details. All services to be insulated with 25mm(min) mineral wool quilt around pipe boxed in using plywood and S.W. frame boxing plated with two layers of 12mm Gyproc Wallboard. All voids around pipes to be sealed. All SVP to have screwed panels for access to rodding points.
- All boilers indicated are to be wall mounted gas combination boilers. Specification to be agreed. Boiler must have a balanced flue and be fitted with a Delay start thermostat and weather compensator controls. All works must be carried out by a Gas Safe registered heating/mechanical engineer.
- Include for the supply and fit of 'stelrad' radiators to all rooms and include for thermostatic controls to all radiator positions. All radiators to be sized in accordance with specification and to 21 and -1 degree ambient external temperature.
- All showers are to be wall mounted with local thermostatic control valves. Specification to be agreed.
- Inline blending Valve Tap to be fitted to Bath with max. 48°C
- Ground Floor W.C. to connect to stub stack fitted with Durgs Valve and to have a Rodding Eye.

Windows & Doors

- Windows are to be PVCU framed, Colour: TBC.
- Windows are to provide 1/10th the floor area with opening lights to 1/20th the floor area. All windows to habitable rooms to have background ventilation of 8000mm², kitchens to have background ventilation of 4000m². All to be fitted with high performance double glazed units, with double glazed (low E glass to en_0.05) with 16mm air gap between panes and provide a u-value of 1.5 W/m²K
- To aid in means of escape all proposed windows are to have an unobstructed open area that is 0.33m² min., 450mm high or 450mm wide min. with a cill height 800mm min. to 1100mm max. above f.f.l.
- Internal window boards to be 32mm finished good quality redwood, skirting boards and architrave to match existing. Point finish abutments with 'painter's mate', knot, stop and prime all timbers prior to decoration.
- All glazing throughout the property must comply with 'Part N' of the Building Regulations. All glazing below 800mm to be toughened or protected, details to be issued prior to construction.
- External entrance doors to provide minimum 850mm clear width

Rev	Date	Description
A	26.09.21	Scheme Amendments

All dimensions to be checked on site. Figured dimensions to be read in preference to scaled. Architect accepts no responsibility for any unauthorised amendments to the drawing and does not permit unauthorised copying of the drawing.

Client	TBC	Job number	-	Revision
Job title	Proposed Extension & Alterations at 40 Liverpool Road, Liverpool	Drawing number	103	A
Drawing title	Proposed Section	Scale	NTS	
		Drawn	-	Checked
		Date	-	09.21