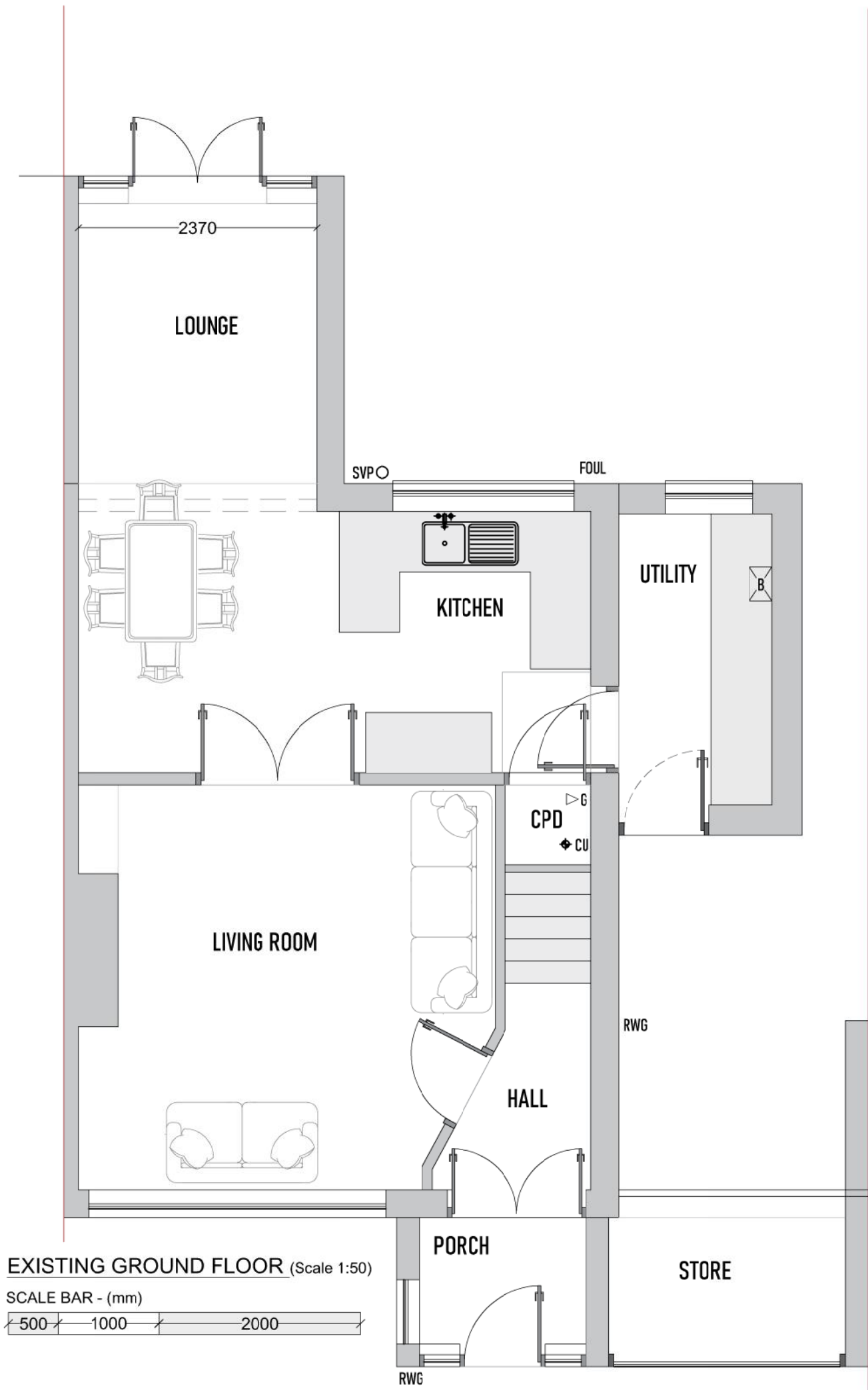




STRUCTURAL DESIGN TO BE UNDERTAKEN PRIOR TO WORKS COMMENCING

New and altered structural elements such as beams, steelwork and bearings must be designed by a qualified structural engineer and complete calculations are to be provided justifying adequacy for purpose.

Existing foundations to be assessed by SE and BCO and agreed for suitability, or upgraded where necessary

Condition of existing building to be further assessed for suitability. Existing beams and lintels should be determined by SE and assessed / replaced where required

NOTE: Windposts may be designed out by structural engineer if justified.

SD Smoke Detector & Sounder Hardwired and interlinked BS 5839

HD Heat Detector & Sounder Hardwired and interlinked BS 5839

FD FIRE DETECTION UPGRADE THROUGHOUT DWELLING

EF Extract Fan - Suitable for room use PART F

EL External Lighting - PART P

B&F Boiler & Flue and installation to PART J locations to be confirmed by specialist.

G Gas point

CU Consumer Unit

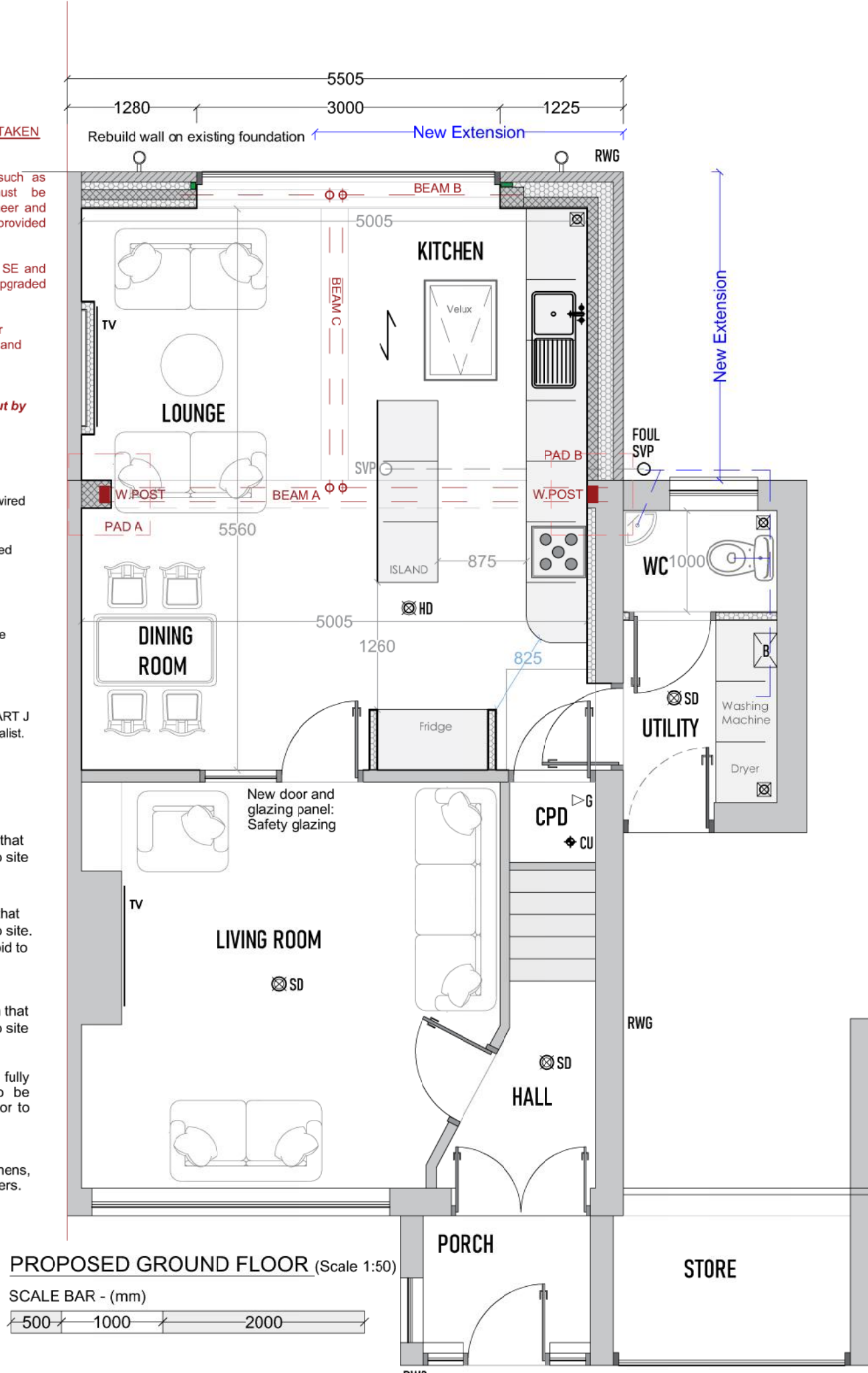
RWP RWP positions may differ from that shown, for final location refer to site PART H

SVP SVP positions may differ from that shown, for final location refer to site. SVP boxed with 2x12.5mm. Void to be packed with Fibreglass quilt insulation, PART H

FOUL FOUL positions may differ from that shown, for final location refer to site PART H

Note: Lines of drainage could not be fully determined. New drainage runs to be agreed onsite with Building control prior to covering up

Final room layouts and finishes Kitchens, bathrooms, WC's to be decided by owners.



Note: Lines of drainage could not be fully determined. New drainage runs to be agreed onsite with Building control prior to covering up

Final room layouts and finishes Kitchens, bathrooms, WC's to be decided by owners.

Minimum Thermal Elements

Wall Insulation - 0.18W/m²K
Roof Insulation - 0.15W/m²K
Floor Insulation - 0.18W/m²K
Windows & Doors - 1.4W/m²K

See Specifications & Details L18 - CONSERVATION OF FUEL AND POWER IN EXISTING DWELLINGS

VAULTED ROOFS - MINIMUM PITCH 15°
TIMBER SIZES: 47 x 170 C16 @ 400 Centres
Timbers to be doubled up around any velux's

U-VALUE: 0.15W/m²K Minimum
1. BETWEEN - K107 Kooltherm Pitched Roof Board 120mm
2. UNDER - K118 Kooltherm K7 Insulated Plasterboard 32.5mm

ROOF TILES: To be suitable for final roof pitch
MEMBRANE: Suitable Breathable membrane - Kingspan Nilent

PLANNING NOTES
The materials of the extension (such as bricks, tiles, rendering, timber etc) should whenever possible match those of the existing property and be of the same colour, texture and size. If matching materials are not available, the materials should be as close a match as possible.
Windows and doors should be of the same proportions, design and materials of the existing house and should be in line with the existing openings.

SPECIFICATION

These plans shall not be acted upon until they have been approved in accordance with clause 14 and 12(2)(b) of the Building Regulations 2010. Should the owner or builder commence work without the above approval they do so at their own risk.

Dimensions given on foundations are only indicative for normal conditions. Should it be necessary to provide underpinning, raft foundation piled foundation or other construction the builder shall contact the Building control surveyor as soon as possible. All goods and materials unless otherwise specified shall be in accordance with the latest British Standard and Code of Practice.

The terms Builder or Contractor shall mean the person responsible for the construction. Deviations from the approved drawings can be made but only with the consent of the client and Building Control Officer.

Planning permission from the local authority is required for this project and contractor is to check the boundaries of the site and is not to build on and not owned by the client without obtaining the neighbors consent.

No trial holes have been taken on site and the builder must acquaint himself with the ground conditions of both the site and adjoining areas. Existing foundations to be assessed for suitability and extra loadings where required.

All dimensions given whether figured or scaled are to be checked and verified on site by the contractor prior to commencement of work. Figured dimensions are to take preference over scaled dimensions.

The contractor must provide the appointed Building control body with all statutory notices for inspections and must liaise with the statutory undertakers and comply with their requirements.

STRIP FOUNDATIONS

Strip footings shall be constructed of 25 N/mm concrete (sulphate resistant if necessary) with a min thickness of 250mm and a min width of 600mm to cavity and party walls, and a min of 450mm to internal load bearing walls. Foundations shall be founded on suitable sub-strata to the satisfaction of the BCO and below invert level of any drains within 1m of the building. Foundations with increased loading to be exposed for inspection by the BCO, to determine load-bearing capacity and underpinned if required.

SOLID FLOOR SLAB

To meet min U value required of 0.18 W/m²K (0.15W/m²K Proposed); Site preparation 150mm of mechanically compacted hardcore with 25mm sand blinding above, a 1200p DPM, to be lapped up and in with DPC in walls. Floor to be insulated with min. 150mm Kingspan K106 insulation (or similar) with minimum 25mm insulation to continue around room 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 150mm and sealed. / Where drain runs pass under new floor, provide A142 mesh 1.0m wide within bottom of slab/ min 50mm concrete cover over length of drain.

125mm thick 25N/mm concrete slab with 25mm screed with light mesh reinforcement where required to manufacturers recommendations.

A VCL should be laid over the insulation boards and turned/ up 100mm at room perimeters behind the skirting, all joints to be lapped 150mm and sealed. / Where drain runs pass under new floor, provide A142 mesh 1.0m wide within bottom of slab/ min 50mm concrete cover over length of drain.

Where existing suspended timber floor air /bricks are covered by new extension, ensure cross-ventilation is maintained by connecting to/ 100mm dia UPVC pipes to terminate at new 65mm x 215mm air bricks built into new cavity wall with 100mm concrete cover laid under the extension. Ducts to be sleeved through cavity with cavity tray over.

WALLS

EXTERNAL WALLS - All walls below dpc level shall be built in brick. Cavity walls shall be 102mm outer leaf of approved facing brick or solid concrete block if Walls are to be rendered externally. 150mm DITTherm Cavity Slab 34 insulation, Blockwork K= 0.150 (Standard Aircrete) block inner leaf with 12.5mm plasterboard on dabs to give a U-value of 0.18W/m². Concrete block will be used to the inner skin under key load bearing points where necessary and to the agreement of the BCO.

DPC's No less than 150mm above external finished floor level. Movement joints to be provided in accordance with block and brick manufacturers recommendations. The cavity is to be concrete filled up to 225mm below dpc. Wall ties are to be stainless steel to BS EN845-1 and DD140-2 spaced at 750mm horizontally, 450mm vertically and 225mm vertically at reveals. Internal block walls are to be 100mm Toplite Standard block.

Partition walls are to be 100 x 50mm s.w. studs @ 400mm centres with 100mm Rockwool RW3 slabs between, with 12.5mm plasterboard and skim finish each side (Average sound reduction 42dB). Plate bathroom and kitchen walls (if studs) with Duplex wallboard.

Hyload dpc's to be 150mm min above ground level to coincide with top of slab level and laid on mortar bed above and below, and to all cavity closures. Damcore insulating dpc to all cavity closures around openings. Tooth and bond new brickwork to existing, and maintain clear cavity where new joints existing, or bond new brickwork to existing using Furtek or Crocodile, stainless steel profile ties. Cavity trays to be installed where appropriate and in accordance with manufacturers details.

PITCHED ROOF (Vaulted Minimum 15° pitch)

Interlocking tiles (suitable for pitch) on 38x19mm battens on layer of breathable membrane on counter battens. 47x170mm C16 @ 400c designed, braced and manufactured to BS5268. Trusses to be clipped to wallplates with proprietary clips. Wallplates to be 50 x 100mm s.w. and anchored to blockwork at 1500mm centres, with 900 x 32 x 2.5mm galv. M.s. anchor straps. Lateral restraint straps to be provided to all gables @ no more than 2m centres including strapping of highest point that will give secure connection. Insulation: Overall U-value, roof to achieve 0.15W/m²K minimum:

- BETWEEN RAFTERS- Kooltherm Pitched Roof Board - 120mm (minimum thickness)
- UNDER - K118 Kooltherm K7 Insulated Plasterboard - 32.5mm (minimum thickness)

CAVITY TRAYS

Running horizontally within the cavity wall and are appropriate in such situations as:

- At the abutment of a flat roof with a cavity wall
- At the abutment of a lean-to roof with a cavity wall
- Above door or window openings
- Above the edge of a concrete slab or ring beam
- Above airbricks or meter boxes
- Above ducts, pipes or cavity liners which pass through an external wall.

When installing horizontal cavity trays over a roof abutment the line of the cavity trays should be approximately 150mm above the top of the finished roof line. This distance will vary slightly depending on how the roof line falls with the coursing on the face of the wall.

however, it must be a minimum of 75mm above the top of the finished roof line. The exposed area between the base of the cavity tray and the roof covering must then be fully protected by an appropriate external flashing

LIGHTING

Internal lighting shall incorporate a fixed light fitting that only takes lamps having a luminous efficiency greater than 40 lumens per circuit-watt e.g. fluorescent tubes and compact fluorescent lamps.

External lighting, which includes lighting within porches, should be as described above or should automatically extinguish when there is enough daylight and when not required at night.

HEATING AND HOT WATER

All flues and chimneys shall be installed and constructed in accordance with the provisions of Approved Document J, Heat Producing Appliances.

The heating system shall be controlled by the provision of either a room thermostat or thermostatic radiator valves, all in accordance with Approved Document L, Conservation of Fuel and Power.

The controls for hot water storage vessels shall consist of a thermostat and a time switch. Hot water storage vessels shall be installed in accordance with BS 5615 and pipe work shall be insulated to BS 5422 in accordance with Approved Document L.

VENTILATION

Habitable rooms shall have ventilated openings of at least 1/20 of the floor area. In addition it shall be provided with a controllable trickle ventilator not less than 8000 mm². Kitchens shall have mechanical extract ventilation not less than 60 litres/sec and controllable trickle ventilator not less than 8000 mm². Sanitary accommodation shall have mechanical extract ventilation not less than 6 litres/sec and controllable trickle ventilator not less than 4000 mm². Bathrooms to have mechanical ventilation capable of extracting 15 litres/sec and controllable trickle ventilator not less than 4000 mm². Utility rooms shall have mechanical extract ventilation not less than 30 litres/sec and controllable trickle ventilator not less than 4000 mm². In kitchens, utility rooms, bathrooms and sanitary accommodation not containing operable windows the fan should have a 15 min overrun controlled by the light switch.

Where existing or proposed gas appliances are located in a dwelling the builder must ensure that a gas spillage test to BS5540 is carried out if he is installing any mechanical ventilation. Where a fan causes an appliance to spill the extract rate should be reduced to prevent any spillage.

The following measures are to be taken to limit infiltration:-

- Fitting draught-stripping in the frames of operable elements of windows, doors and roof lights
- Sealing around loft hatches
- Ensuring boxing for concealed services is sealed at floor and ceiling levels, and sealing piped services where they penetrate or project into hollow constructions or voids.

DRAINS

Foul and surface water drains shall be 100mm Hep sleeve (or other approved) with flexible joints, laid to a min fall of 1 in 40 on 100mm granular bed. Inspection chambers up to 0.6m deep to be 190mm diameter. Inspection chambers up to 1.2m deep to be 450mm diameter. Inspection chambers over 1.2m to be 450mm diameter and fitted with access restrictor to 350mm. Drains under the building shall be encased in 150mm concrete. A reinforced concrete lintel shall protect any drains passing through walls over. All sanitary ware is to be UPVC, 100mm diameter S&VP with vent outlet 900mm above the highest window opening light. 38mm diameter waste pipes to washbasin, sink, shower, bath, etc. to be 100mm dia UPVC pipes to terminate at new 65mm x 215mm air bricks built into new cavity wall with 100mm concrete cover laid under the extension. Ducts to be sleeved through cavity with cavity tray over.

GENERAL

All structural elements of structure to be protected to 30 minutes minimum.
Cavity lintels or other approved are to be provided to all door and window openings. Lintels to be checked with manufacturer for suitability to take loading over span required. All lintels in external walls to be insulated and dpc's with preformed stop and cavity trays to be provided above all lintels.
Walls are to be tied to all floor and roof joists at with galvanised m.s. straps.
Provide adequate flashings and cavity trays at roof abutments.
All New external windows and doors to be triple glazed 1.3w/m²K minimum
UPVCs to be purpose made softwood or UPVC by agreed Manufacturer to agreed specification and fitted into brickwork openings using proprietary straps to suit window frames. Heads to windows over 1200mm to be provided with head fixings into steel lintels using self-tapping screws. Mastic seal window and door frames externally.
The following to be safety glass to BS6206:-

- Any glazing within 800mm of floor level.
- Any glazing in doors within 1500mm of floor level.
- Any glazing in side panels within 1500mm of floor level.

Any hot water pipes shall be insulated with a material not exceeding 0.035 W/m²K and a thickness equal to the outside diameter of the pipe

All electric switches, sockets and lighting positions to be agreed with client prior to commencement of work.

All radiator and heating appliance positions and specifications to be agreed with client prior to commencement of work.

ACCESS

Switches and socket outlets for lighting and other equipment to be positioned between 450mm and 1200mm above finished floor level. All door openings to be min 775mm clear opening to facilitate wheelchair maneuvers.

FIRE SAFETY AND MEANS OF ESCAPE

Smoke detectors and alarms to be provided to circulation spaces within the dwelling at all levels BS5839. They should be mains operated and interlinked. The supply shall comprise of an independent circuit from the distribution board.
Egress windows at first floor level and to inner habitable rooms, minimum opening: 450 x 750mm clear opening. 0.33m² minimum opening.

ELECTRICAL INSTALLATIONS

All electric work required to meet the requirements of Part P (Electrical Safety) and should be installed by an electrician who is registered with a Part P Self-Certification Scheme. A completion certificate to must be forwarded to the Local Authority within 30 days of installation.

STAIRS AND BALUSTRADES

Construct the stairs to approved document K, see section drawing ensure a 100mm sphere cannot pass through openings

GENERAL NOTE: ALL WORKS TO BE UNDERTAKEN TO LATEST BUILDING REGULATIONS, BRITISH STANDARDS AND MANUFACTURERS RECOMMENDATIONS

THE EXTENSION HOUSE

PLANNING & DESIGN SERVICES

54 St James Street, Liverpool, L1 0AB

TheExtensionHouseLtd@gmail.com

Tel: 07568 164 169

ALL WORKS TO BE UNDERTAKEN TO LATEST BUILDING REGULATIONS, BRITISH STANDARDS AND MANUFACTURERS RECOMMENDATIONS.

TOWN AND COUNTRY PLANNING ACT 1990 - Advice to be taken from the Local Authority by Client, Planning permission should be applied for and obtained by the owners prior to work commencing.

BUILDING REGULATIONS APPROVAL - Building control approval is required for this project. The contractor must provide the appointed Building control body with plans for assessment and all statutory notices for inspections and must liaise with the statutory undertakers and comply with their requirements.

- Full plans approval building control approval to be obtained by the owners prior to work commencing, or
- Building Notice for domestic extension projects only, additional inspections and notifications will be needed to ensure compliance throughout the build.

PARTY WALL ACT - Prior to commencing work the builder/owners shall ensure that neighbors have been given notice under the Party Wall Act 1996.

CDM REGULATIONS 2015 - The contractor/builder shall be fully aware of the latest Construction (Design and Management) Regulations 2015. The contractor shall notify the Health and Safety Executive where required. Client is responsible for the appointment of a competent contractor/builder.

GENERAL - All dimensions given whether figured or scaled are to be checked and verified on site by the contractor prior to commencement of work. Figured dimensions are to take preference over scaled dimensions.

PURPOSE	Planning and Building Regulations Only	SITE ADDRESS	
WORK	Single storey rear extension	7 Pine Ct, Kirkby, Liverpool L32 0RZ	
		Number 1	REVISION B
DRAWING	Existing and Proposed Plans and elevations	SCALE 1 - A1 1:50 Floor Plans	SCALE 2 - A1 1:100 Elevations
		SCALE 1 - A1	SCALE 2 - A1

