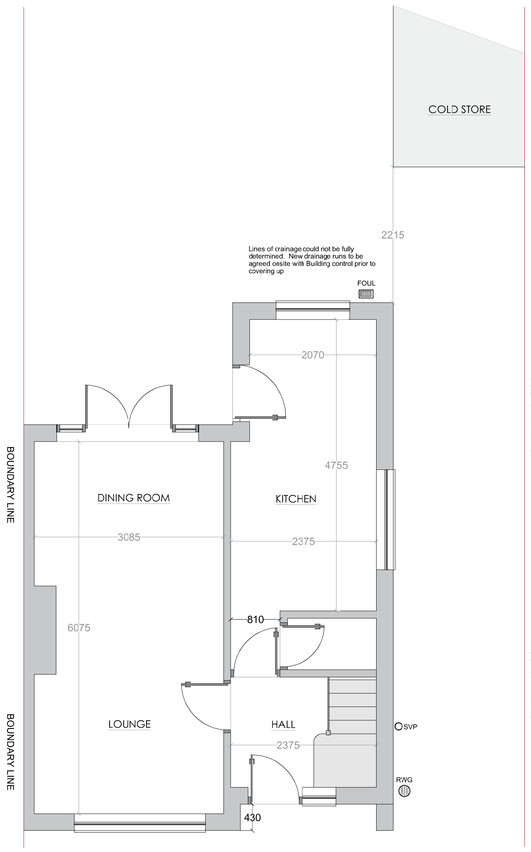
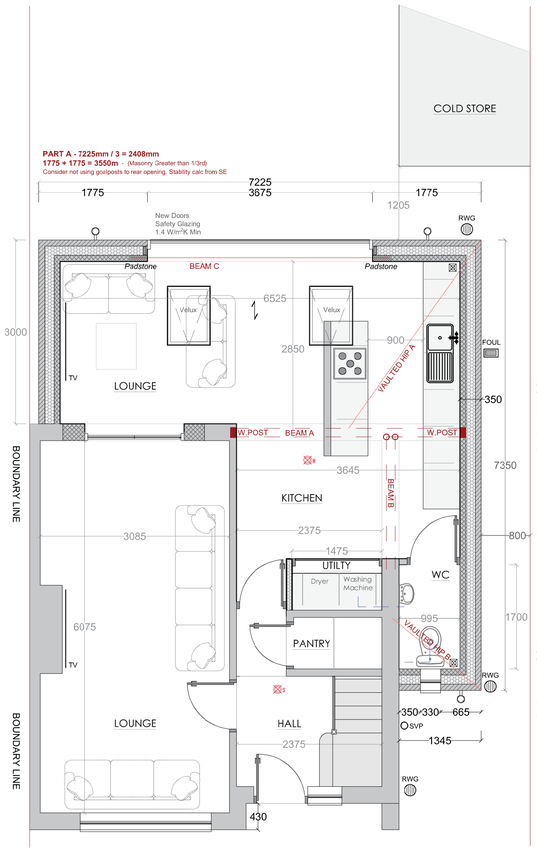


EXISTING GROUND FLOOR (Scale 1:50)

SCALE BAR - (mm)

500 1000 2000



PROPOSED GROUND FLOOR (Scale 1:50)

SCALE BAR - (mm)

500 1000 2000

New Minimum Thermal Elements

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

GARAGE DOES NOT NEED TO BE INSULATED

See Specifications & Details L1B - CONSEVATION 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: 0.18W/m²K Minimum
-BETWEEN - Kooltherm Pitched Roof Board (120mm)
-UNDER - K118 Kooltherm K7 Insulated Plasterboard** (32.5mm)

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

Smoke Detector & Sounder
Heat Detector & Sounder
New Steelwork / Trimmers
Extract fan
External Lighting

New sockets and spot lights to owners design - Part M

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

30 Minutes Structural Protection Minimum

- Final room layouts: Kitchens, Bathrooms, WC's to be decided by owners.

Dormer walls to party wall side to be provided with superlux board or Pronsat masterboard to achieve required fire separation between the neighbouring property.

New and altered structural elements such as steelwork and bearings must be designed by a qualified structural engineer and complete calculations are to be provided justifying adequacy. Existing foundations to be assessed by BCO for suitability

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 specifiec 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 land 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 BCC, to determine load-bearing capacity and underpinned if required.

FLOOR SLAB

25mm sand blinding; 1200g visqueen DPM, lapped with dpc to walls on 100mm Kingspan TF70 Floorboard (**0.18 W/m2K**) or similar insulation; 1200g visqueen and 18mm plywood floor deck with 10mm gap to perimeter and suitable floor finish.
DORMER CONSTRUCTION - SEE DRAWING DETAILS

EXTERNAL WALL 350mm Thick (150mm Cavity)

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 Dritherm 34 insulation, 100mm Tarmac Toplite Standard block inner leaf to give a **U-value of 0.18W/m².**

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.

ALTERNATIVE EXTERNAL WALL

All walls below dpc level shall be built in brick. Cavity walls shall be 102mm outer leaf of approved facing brick, 90mm Kingspan K106 insulation, 100mm Tarmac Toplite Standard block inner leaf with 12.5mm plasterboard on dabs to give a **U-value of 0.18W/m2**. 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. Min 7N Concrete blocks to be used below point loads (Underside of padstones).

ALTERNATIVE EXTERNAL WALL BUILDUPS TO BE AGREED WITH BUILDING CONTROL

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 joins existing, or bond new brickwork to existing using Furfix or Crocodile, stainless steel profile ties. Cavity trays to be installed where appropriate and in accordance with manufacturers details.

SUSPENDED TIMBER FLOORS

Timber floors shall be 25mm t&g flooring grade chipboard on ' specified' joists (see Drawing) with 100mm mineral wool between joists 12.5mm soundshield or 15mm wallboard plasterboard and skim to ceilings. Provide 38mm thick solid strutting at mid span. If joists span over 4.5m then provide two rows of strutting at third span positions.

PITCHED ROOF (Vaulted Minimum 15° pitch)

Interlocking tiles (suitable for pitch) on 38x19mm batters 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**.

1. 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: -

a) Fitting draught-stripping in the frames of operable elements of windows, doors and roof lights

b) Sealing around loft hatches

c) 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 washbasins. 50mm diameter to all other appliances. 75mm deep seal traps. All ground floor wastes are to discharge into back inlet gullies below grating level. Rainwater goods are to be UPVC, 100mm gutters, 75mm diameter drops.

GENERAL

All structural elements of structure to be protected to 30 minutes.

Catnic 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 end 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.

New windows and doors to be double glazed **1.4w/m2k minimum**

Windows 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: -

a) Any glazing within 800mm of floor level.

b) Any glazing in doors within 1500mm of floor level.

c) 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/mK 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 alarms to be provided to circulation spaces within the dwelling at all levels.
They should be mains operated and interlinked. The supply shall comprise of an independent circuit from the distribution board.
A fully protected escape route from the loft area to a final exit is to be formed using FD20 doors to all rooms.
Egress windows to be provided to habitable first floor rooms. Minimum sizes: 750mm High, 450mm Wide
(Clear openable area of at least 0.33m² and the bottom of the openable area should not be more than 1100mm above the floor.
See Approved Document B para 2.8.

ELECTRICAL INSTALLATION

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 BALUSTRADING

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

EXISTING FRONT ELEVATION (Scale 1:100)

SCALE BAR - (mm) 500 1000 2000

EXISTING REAR ELEVATION (Scale 1:100)

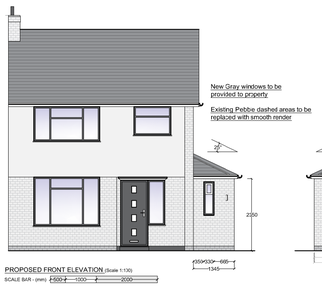
2000 1000 500 SCALE BAR - (mm)

EXISTING SIDE ELEVATION (Scale 1:100)

SCALE BAR - (mm) 500 1000 2000

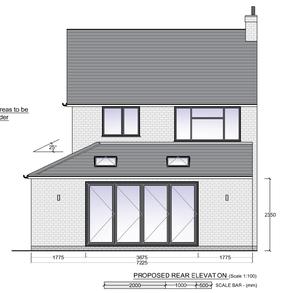
EXISTING SIDE ELEVATION (Scale 1:100)

SCALE BAR - (mm) 500 1000 2000



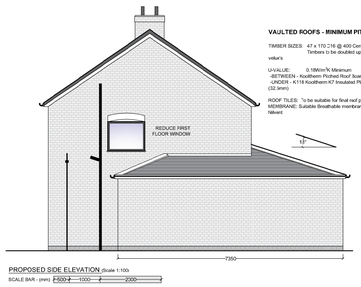
PROPOSED FRONT ELEVATION (Scale 1:100)

SCALE BAR - (mm) 500 1000 2000



PROPOSED REAR ELEVATION (Scale 1:100)

2000 1000 500 SCALE BAR - (mm)



PROPOSED SIDE ELEVATION (Scale 1:100)

SCALE BAR - (mm) 500 1000 2000

PROPOSED SIDE ELEVATION (Scale 1:100)

SCALE BAR - (mm) 500 1000 2000

FLOOR SLAB 0.18w/m2K
KINGSPAN TF70 - 100mm

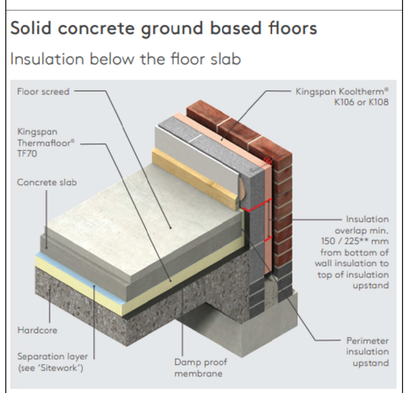
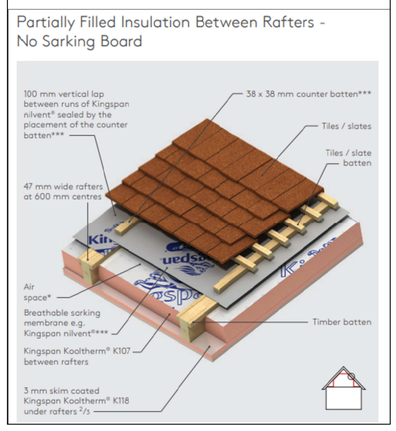


Figure 5

VAULTED ROOFS
MINIMUM PITCH 15°
U-VALUE: 0.15W/m²K Minimum
1. **BETWEEN - Kingspan K107 (120mm)**
2. **UNDER - K118 Kooltherm K7 Insulated Plasterboard** (32.5mm)**



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, full planning permission should be applied for and obtained by the owners Prior to work commencing
BUILDING REGULATIONS APPROVAL - is required for this project. 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.
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.
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	40 Beechwood Ave Liverpool L26 1XB
WORK	Erection of Single storey wraparound extension	Number 1	REVISION B
DRAWING	Existing Ground Floor & Elevations Proposed Ground Floor & Elevations	SCALE 1 - A1 1:50 Floor Plans	SCALE 2 - A1 1:100 Elevations