

The diagram is a detailed architectural floor plan of an existing ground floor. It features three bedrooms: Bedroom 1 (top right), Bedroom 2 (top left), and Bedroom 3 (middle left). A central hall connects these bedrooms to the bathroom (middle right) and the living room (bottom right). The kitchen is located at the bottom of the plan. The plan includes various architectural details such as doors, windows, and furniture like beds, a bathtub, a toilet, and kitchen fixtures. A scale bar and a north arrow are present at the bottom.

**EXISTING GROUND FLOOR PLAN**  
**Scale 1:50**

**FOUNDATIONS**  
Existing building area to be stripped of all vegetable matter and rubbish to a minimum depth of 150mm before excavation commences. Concrete mix for foundations to be GEN3 in accordance with BS5328:1981. Foundations to external wall to be min.700mm wide x 225mm deep. Excavation down to solid 1st strata to 750mm depth or 900mm if it is of a shrunken (live nature). Excav depth to suit conditions on site and to the strict approval of the L.A Building Inspector. Any irregularities in subsol during excavation to be brought to the immediate attention of the Building Inspector & advice to be sought from a Chartered Structural Engineer.

3no. Courses of Class B brickwork below D.P.C on outer face and 1no. course of 7N/mm<sup>2</sup> on inner skin of cavity face. Elsewhere to be either 7N/mm<sup>2</sup> concrete blockwork or full width trench blocks. Both to be within 225mm of DPC level. Cavity to be filled to within 225mm min. of below DPC with lean concrete mix.

Horizontal heavy duty polythene DPC "Hyload" or similar approved to all walls in accordance with BS 6515 and set min.150mm above all external ground levels.DPC in walls must be linked / lapped with DPM in ground floor.Provide performed cavity wall trays above windows & doors with weep vents at a max. of 2m centres with a min. of 2 no. per opening.

65mm mortar screed with a light gauge reinforcing chicken wire on 500 gauge polythene separating layer on a 60mm Celotex Double R GA3000 rigid insulation board or similar approved, provide 30mm thick perimeter insulation between screed and floor insulation upto d.p.c level on 100mm thick GEN3 concrete sub-floor on a 1200 gauge DPM lapped onto DPC within walls on min.150mm clean and well compacted hardcore Depth of hardcore must not exceed 600mm and must be compacted in 150mm thick layers. All service entries to be sealed with pressure sensitive tape. Floor to achieve a min 'U' Value of 0.25w/m<sup>2</sup>K

1. Apply a layer of 1.5mm thick DPM to the surface of the slab.
2. Install a Damp Proof Membrane (DPM) below the slab OR apply a liquid waterproofing material to the top surface of the slab.
3. The DPM must provide continuity with DPCs installed within the surrounding walls.
4. Level the surface of the slab; it should be smooth and free of projections.
5. Use a thin sand binding on a rough tamped slab to ensure that boards are continuously supported. Cut strips of board as required to fit around floor parameters to eliminate any sharp edges.
6. Upstand depth should equal the sum of the slab insulation and screed thickness.
7. The upstand thickness should not exceed the combined thickness of wall plaster and skirtings.
8. Lay boards directly onto the prepared slab, cutting off inboard as required. Joints must be tightly butted. The use of a polythene vapour control layer over the insulation is recommended by the BRE to minimise the risk of condensation forming at the insulation/slab interface.
9. Apply a sand/cement screed over the G300002 boards to a minimum thickness of 65 mm. Use scaffold boards or other protection to prevent wheelbarrows and other traffic damaging boards.

9. Allow screed to dry thoroughly before an impermeable surface, such as a vinyl floor finish, is applied.

10. These recommendations are suitable for normal domestic floor loadings. If higher loadings are required it may be necessary to increase screed thickness and provide reinforcement within the screed. See *19618 Thermal Bridging and Air Leakage: Robust construction details for dwellings and similar buildings* ISBN 0 11 793 6318, published by HMISO.

Installation guidelines (under slab)

Insulation under the slab must have: Level and well blinded hardcore. DPM (Damp Proof Membrane) placed under insulation. Insulated upstand = thickness of slab + screed. DPM contiguous with the DPCs. Vapour control layer (e.g. 1000g polythene) laid directly over insulation.

75mm tile overhang on Supalux under cloak, feature brickwork to project 25mm. Denta work & corbels to be agreed with client on site.

**PROPOSED REAR ELEVATION**  
**Scale 1:100**

**LIVING ROOM**

Block up existing door and finish to match

Tie new blockwork to existing with "Strong Tie Connectors" or similar approved.

**FAMILY ROOM**

Remove existing window and cut down reveals to form opening, finish to match

Internal brickwork to be finished to match extension

**KITCHEN**

Kitchen layout shown is indicative only & must be confirmed on site together with the extent of Wall & Floor Tiling

**Garage**

Access to rear garden achieved via personnel garage door

**Notes:**

- Underground drains to be as rainwater drainage but with min.1:80 and max.1:40
- Falls: Fall of drains from gullies to be 1:40. All drains passing thro' walls to have concrete lintel over with 50mm space around filled with compressible material and opening masked with durable rigid sheet to prevent ingress of vermin or back fill. Drain runs must not be any lower than foundation depth unless min of 1m from any building. Provide roddable access to all change in bends and junctions. Contractor to ensure no live drains run beneath proposed works.
- Note: Provide energy efficient lights and bulbs to Kitchen. The light fitting is to only receive a bulb that has a luminous efficacy greater than 40 lumens per circuit-watt.
- Fit 60L/sec extractor fan to Kitchen or 30L/sec if contained within cooker hood via a flexible ducting kit running the external wall.
- All external lights except garage to have a sensor which will extinguish the light when there is enough daylight and when not required at night

**Dimensions:**

- Overall width: 3880
- Overall depth: 6635
- Living Room width: 2485
- Family Room width: 2485
- Kitchen width: 2485
- Garage width: 1900
- Living Room depth: 3040
- Family Room depth: 1235
- Kitchen depth: 1360
- Garage depth: 1335
- Living Room window opening: 1335 x 1990
- Family Room window opening: 1335 x 1990
- Kitchen window opening: 1335 x 1990
- Garage window opening: 1335 x 1990
- Living Room window opening: 1335 x 1990
- Family Room window opening: 1335 x 1990
- Kitchen window opening: 1335 x 1990
- Garage window opening: 1335 x 1990

### EXTERNAL WALLS

All external walls to be 275mm overall thickness comprising of:  
 -100mm Facing Brickwork to match existing  
 -75mm cavity filled with Crown Dritherm (or equal approved) built in as work progresses. Insulation batts should be kept clean and free from mortar droppings, all joints should be closely butted. Any cutting and fitting should be neatly done and not leave any visible layers of glass wool or mineral wool.  
 -100mm Thermalite Slab insulating blockwork.  
 Continue wall insulation at least 150mm below top of perimeter floor insulation and support off wall ties.  
 External wall to achieve a min 'U' value of 0.35w/m<sup>2</sup>K.

Close all cavity walls at joints with Thermabate or similar approved Insulated cavity closers fitted strictly in accordance with manufacturers instructions. Roof insulation to be continuous with wall cavity insulation. Install Insulated Cavity Closers by Thermabate or equal approved, 25mm thick x .....mm wide (to equal cavity width) at joints and sills of all openings in masonry cavity walls. Secure with the proprietary clips provided at maximum 500mm centres. Ensure that closers fit tightly to each other and to the lintel. The closer at the jamb must completely lap the closer at the sill.

Stainless steel cavity wall ties to BS1243:1978. To be built into cavity wall as works proceeds and spaced at 750mm centres horizontally, 450mm centres vertically and 300mm staggered around all openings. Ensure wall ties are level or at least sloping to the outside leaf. Bed ties a minimum of 50mm into each leaf and ensure wall ties are completely free from mortar droppings.

New window opening vents to Family room to allow means of escape in an emergency situation. Opening vent to be min.450 wide in each direction with an area of 0.33m<sup>2</sup>. sill level to be within 800mm & 1100mm of FFL and fitted with egress hinges

New window opening vents to Family room to allow means of escape in an emergency situation. Opening vent to be min.450 wide in each direction with an area of 0.33m<sup>2</sup>. Cill level to be within 800mm & 1100mm of FFL and fitted with egress hinges.

NOTE: MANUFACTURER'S DETAILS & CALCULATIONS TO BE FORWARDED TO SHDC'S BUILDING CONTROL OFFICER FOR APPROVAL AT LEAST 21 DAYS PRIOR TO FIXING ON SITE

Extend / modify existing gable wall to allow new roof finish to extend over to proposed gable wall

Soffit and fascia profile to clients requirements fitted strictly in accordance with manufacturer's recommendations

30x50 m/s straps (S) over 2no. trusses at max 2m ctrs to gable ends and ceiling level. At least 1 no gable strap to be within 500mm of ridge. Provide solid noggings under each strap.

Solid pack void between last rafter and blockwork with mineral fibre insulation and solid timber packs.

Note: Provide 50x50 timber noggings for partition head fixing and pendant light fixings. Position of light fixings to be agreed on site with client.

|                                                                                                                                                                                                                                                                               |                                                                                                                                                                |
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| <p>All ceilings to be 15mm plasterboard to BS1230.</p> <p>Ceilings to be have Coveing and a skim finish to clients requirements.Plasterboard sheets to be fixed with joints staggered and must be layed perpendicular to all joint runs.Fix boards at a min150mm centres.</p> | <p>All internal finished timber to be free from all defects and to clients approval prior to ordering any materials.</p> <p><b>ELECTRICAL INSTALLATION</b></p> |
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To be self contained, interconnected and wired to a separately fused circuit with a battery back up. Smoke alarms to be fitted to u/side of plasterboard ceiling to the ground floor max 7m from the kitchen / lounge and to be max. 3m from any bedroom door. All alarms to be strictly in accordance with BS 5446 and to be wired that when one alarm is triggered all alarms are activated.

All new plumbing to have the following waste sizes:  
W.C.=100mm ø Multikwik or similar approved  
W.H.B.=32mm ø uPVC with 75mm Deep sealed trap  
SINK=40mm ø uPVC with 75mm Deep sealed trap  
SHOWER=40mm ø uPVC with 75mm Deep sealed trap  
Provide access points to all changes in direction. Provide anti-siphon traps where pipe runs exceed 3m and W.H.B pipe run exceeds 1.8m.

Fix 38x38mm timber noggings to all potential loose plasterboard ceiling edges and light fittings. Position of light fittings to be advised by client on site.

Roof Tiles to be Concrete Interlocking Paving Tiles with min.75mm headlap and 345mm max. gauge to Client's requirements / approved design in accordance with manufacturers instructions and in accordance with BS 9593:Part1 and 2 set out to give true finish. Tiles to be laid on a 100mm thick concrete bed over a 100mm thick concrete screed. Roofing to make the building sound and weathertight at the earliest opportunity. Repair any defects as quickly as practicable to minimise damage and nuisance & keep gutters and pipes free of debris and clean out at completion. Provide 50x25 preservative treated timber battens. Battens should be not less than 12m long and continuous over at least 3 rafters. Battens to be secured with 2x40mm x 100mm nails. Battens to cross, or on which they are joined, with nails in accordance with BS9593: Part 1. The ends of the battens should be sawn square and butt jointed end rafter to an end member so that adequate bearing and nailing can be provided for each end of each batten. Battens should be laid in a staggered fashion so that no more than one batten end is joined in any one bay. Generally all tile abutments with min.75mm overlap and joint. Use Code 4 Lead flashing to all abutments with min.75mm overlap.

The whole area of the ceiling to be insulated with two layers of Crown Wool Mineral Fibre Insulation or equal approved of a total thickness 300mm to achieve a 'U' value of 0.16w/m<sup>2</sup>K. Width of first layer of insulation to be appropriate to the joist spacings and of a thickness equal to joist depth (100mm). The insulation to be laid between the joists to finish over the wall plate on external walls; and pushed up tight to roofing membrane. The second layer (200mm) of Crown Wool to be laid at right angles to the first layer. All joints between the rolls of insulation to be close butted.

Install Tyvek® or similar approved Breathable Membrane in accordance with manufacturers instructions which are briefly described below & BBA certificate 99/3635 (fourth issue) breathe other membranes in non-ventilated pitched roofs of any plan, any shape or any size under all types of roof coverings including tight jointed and interlocking tiles and synthetic slates. Installing Tyvek® underlay in accordance with the above certificate will enable a roof to meet all the requirements of the Building Regulations.

Installation Guidelines

Tyvek® SUPRO should be installed with min. 150mm overlaps as a standard bituminous felt underlay and secured with stainless steel staples or large headed galvanised clout nails.

There is a need to provide vents in air air movement, because a typical membrane installed in a system does not rely upon air movement beneath the membrane to provide ventilation. To avoid this problem, the Eaves Carrier membrane has been designed with a series of raised ribs that provide ventilation beneath the fascia of closed eaves and to prevent prolonged exposure of the membrane to ultra-violet radiation, use a Tyvek® Eaves Carrier. Stop the membrane short of the fascia and lap it onto the Eaves Carrier. Pack closed eaves with fibrous insulation to reduce thermal bridging.

**Vertical details**

Lap the Tyvek® underlap 50mm onto the gable or flying rafter.

**Ridge/hip detail**

Extend the Tyvek® underlap 150mm from each slope and overlap it at the ridge/hip line. There is no need to provide vents at the ridge.

**Valley detail**

Extend the Tyvek® underlap from each slope by 150mm beneath the valley centre line and seal the lap using Tyvek® Butyl Tape to form a watertight seal.

**Abutments:**

Turn up the Tyvek® underlap beneath fixings not less than 50mm.

**Penetrations:**

Seal around all penetrations using Tyvek® Butyl Tape.

All internal finished timber to be free from all defects and to clients approval prior to ordering any materials.

All electrical work required to meet the requirements of Part P must be designed, installed, inspected and tested by a person competent to do so. Prior to completion of the works the council Building Control Officers must be satisfied that either:

1. An electrical installation certificate issued under a competent persons scheme has been issued or
2. An approved person electrical installation certificate has been issued for the work, and that it has been signed by a person competent to do so.

The Engineer is to advise if any appliance, or position of appliance does not conform to regulations. Contractor to seek advice from Client with regard to lighting requirements.

Provided from existing but all radiators are to be fitted with thermostatic radiator valves. All space heating pipework located outside the building fabric insulation layers to be wrapped with insulation material having a thermal conductivity at 40°C not exceeding 0.035 W/mK and a thickness equal to the outside diameter of pipe upto max. of 40mmIt should be noted that central heating and hot water pipework in unheated areas may need increased insulative thicknesses for the purpose of protection against frost, refer to BRE Report No. 262 2002 Edition.

Dotted line shows 25 X 100 diagonal and longitudinal wind bracing, and ceiling tie bracing to be free from all major defects and any weak points and fixed all in accordance with manufacturers details. Joints (if required) to be taken over 2 no. trusses all in accordance with BS5262 Part 3 - 1985. Bracing to be fixed with 21 3.35 x 65mm galvanised round wire nails each cross over and to firmly butt against walls.

Pre - Fabricated Trussed Rafters to be at max 600mm ctrs. Roof construction to be designed strictly in accordance with BS5268 Part 3 1985 and contractor to ensure trusses are fitted strictly in accordance with specialist manufacturers design drawings & calculations. First and last truss to be fixed 25-50mm from wall.

**MASONRY WALL CONNECTORS**

Provide Simpson Strong-Tie or similar approved wall connectors to connect new & existing brick / blockwork. Use all specified fasteners. Fasteners must be spaced evenly, unless otherwise specified, and installed into the existing bricks / block and not into mortar joints. Insert wall ties provided at maximum 300 mm centres, bedding the ties into the mortar joints. Detailed site work instructions are provided with each wall connector system and must be adhered to at all times. In exposed locations it may be necessary to incorporate additional protection, for example the insertion of a vertical doc.

All rainwater to discharge into soakaways and to be min. of 5m from any building & a min. of 1m<sup>3</sup> filled with rubble to within 150mm of external ground level. Overlay rubble with polythene sheet and backfill with clean topsoil. Note the soakaway inlet pipe must discharge to the centre of the soakaway in all directions.

PVC guttering and downpipes to clients approval. Falls for guttering to be 1:600 and brackets fixed at max. 2m centres. Downpipes to be connected into underground drains via reducing adapter. Underground drains to be 110mm Ø Osma uPVC or similar approved with flexible joints laid on 100mm pea gravel and min 150mm surrounds laid to 1:100 falls to new soakaway. Soakaway specification detailed elsewhere.

"A" - 22.03.05 - Layout amended to suit the Planning Dept.

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Site :

### Proposed Rear Kitchen & Dining Room Extension

**PLEASE NOTE:**  
Due to areas of the structure being covered, unexposed or otherwise inaccessible the notes / specifications of existing materials are subject to confirmation of site when it is feasible to expose the relevant areas of construction.

**GENERAL CONDITIONS**  
Contractors are responsible for checking all dimensions on site when work commences and before ordering any materials. Any discrepancies should be brought to the attention of the Client for remedial action before commencing further.

All details shown are based on typical site conditions for that area, any abnormal conditions should be brought to the attention of the Client and Local Authority.

The notes shown are mainly to cover the requirements of Building Regulations and should not be treated as full specifications.

*No allowance has been made for any Structural Calculations, a "SAP" calculation, Soil Investigation or Flood Risk Assessment. If deemed necessary then these will be a chargeable extra. All steel beam sizes shown on drawing are all subject to confirmation from Structural Engineer.*

All materials not specified to be of a standard suitable for the work proposed and be fit for purpose. All work to be in accordance with good building practise and all necessary BS codes for Workmanship on Building Sites.

Drawing No.

**rem 957 - 01 "A"**