

ROOF CONSTRUCTION

Tiles
The roof is to be covered with interlocking concrete roof tiles fixed in strict accordance with manufacturers instructions.

Battens
Approved quality tanalised s/w battens, 38 x 25mm, are to be laid at a gauge suitable for the tiles and fixed with 90 x 3.35mm wire nails. Battens should be at least 1.2m in length and should be of sufficient length to be supported at each end and intermediately by at least three rafters, trusses or walls. Butt joints over intermediate supports should be staggered and the ends must be sawn.

Underlay
Approved reinforced roofing felt, type 1F to BS 747, is to be laid over the rafters lapped 150mm at the joins and secured with clout nails. The underlay should extend over the fascia board and into the eaves gutter. In order to prevent water traps behind the fascia it is recommended that a strip of 6mm marine plywood is provided to support the underlay. The ply is to be laid over the rafters and under the roofing felt positioned as close as possible to the last tiling batten and secured to the fascia.

Eaves
Eaves are to be formed with standard size tiles and purpose made eave fillers must be nailed to the fascia board. Eave tiles must be laid at the same pitch as the main body of tiling and should overhang the fascia by an amount sufficient to ensure that the water discharges into the centre of the gutter.

Verges
Verges are to be formed with 150mm wide asbestos cement strip onto which is bedded the tiles which form the verge projecting approx. 50mm over bargeboards or gable brickwork.

Ridge
The ridge is to be covered with segmental ridge tiles of the same colour as the main body of tiling, unless specified otherwise, and secured using a proprietary ventilated dry ridge system having ventilation equivalent to a continuous 6mm gap.

Mortar
All bedding mortar is to consist of 3 parts sharp sand to 1 part Portland cement and should be struck off to give a smooth face and pointed in one operation.

Insulation
To be Rockwool Rollbatts (k = 0.037 W/mK), 150mm laid between joists with a further layer of 80mm laid at right angles over the top.

Ceilings
12.7mm foil backed plasterboard, fixed in accordance with manuf. instructions with all necessary noggins etc., and finish with artex/skim finish in accord with clients instructions.

Ceiling to garage to be 12.7mm Gypsum Fireline Board with 50mm cover strips to joints to give a half hour fire resistance.

Ventilation
Provide over fascia ventilation (equal to a 10mm continuous gap) to provide cross ventilation to the roof space.

Rainwater Goods
Supply and fix 115mm PVC gutters to fascia with all necessary brackets, stop ends, outlets etc.

Supply and fix 64mm PVC downpipes securely clipped to walls at 1800mm cts with all necessary offsets, swannecks, adaptors etc. and taken into 100mm diam. upturned bend at base.

STRAPPING

Where rafters, floor joist and ceiling ties run parallel to walls they are to be strapped at 1800mm cts. Straps to be fixed to a min. 3No. rafters etc., having nogged between beforehand, and hooked into the cavity a min 150mm.
Similar straps to be used at 1800mm cts to hold down the wall plate.

Straps to be 30 x 6mm galv. m.s.

FLAT ROOF CONSTRUCTION

12.5mm white spar chippings bitumen bedded on
3 layer built up roofing felt, bottom layer to be astos based, dressed up abutments a min 150mm and up adjacent pitched roof a min. 450mm
110mm Jabdek or similar warm roof insulation
18mm exterior grade plywood decking
Firrin pieces to give a fall of 1 : 80
200 x 50mm SC3 grade joists at 400mm cts
12.7mm foil backed plasterboard and skim finish

Where joists run parallel to walls they are to be strapped at 1800mm cts with 30 x 6mm galv m.s. straps fixed to a min 3No. joists, having nogged between beforehand, and securely fixed to walls. Similar straps to be used at 1800mm cts to hold down the wall plate.

Supply and install 115mm pvc gutters and fix to fails on fascia with all necessary brackets, stop ends, outlets etc.
Supply and install 64mm downpipes securely clipped to walls at 1800mm cts together with all necessary offsets, swannecks, adaptors etc. and taken into 100mm diam. upturned bend at base.

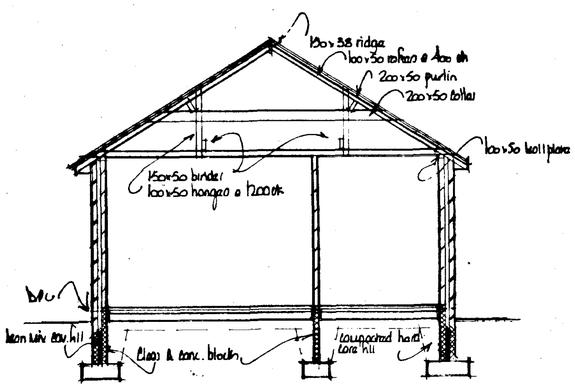
STRUCTURAL STEEL BEAMS

Structural steel beam to have min 150mm end bearing on 2 course Eng. brick padstone.

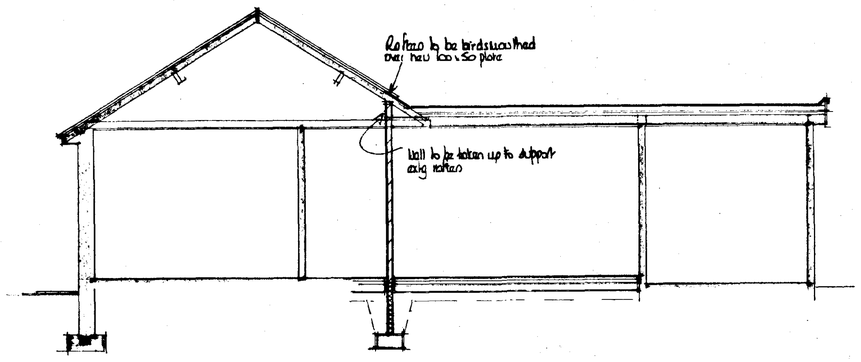
DRAINAGE

Surface
Excavate for and lay in where indicated 100mm diam. flexible jointed UPVC drains on 100mm pea gravel bed from 100mm diam. upturned bend at base of downpipe to surface water soakaway.

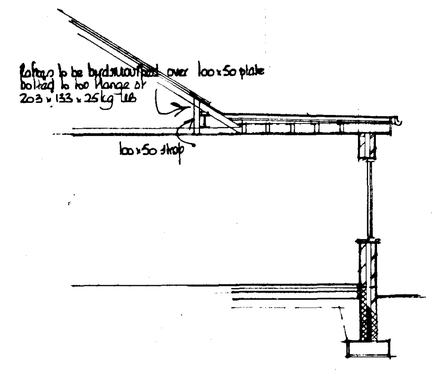
Form soakaway where indicated a min. 5.0m from the nearest building. Excavate 1200 x 1200 x 1200mm deep, backfill with brick rubble to 300mm below ground level, lay in sheet polythene and make up with vegetable soil.



a-a



b-b



c-c

WALL CONSTRUCTION

Below Ground
To be 100mm Class A concrete blocks
Cavity to be filled to 225mm below lowest dpc level with lean mix concrete

Above Ground
To be 265mm o/a constructed as follows :-

100mm facing brick (to be FL quality below dpc level)
65 mineral wall insulation i.e. Dritherm (k = 0.036)
100mm loadbearing insulation blocks i.e. Hemelite (k = 0.44)

All to be tied together using stainless steel wall ties positioned at distance not exceeding 900mm horizontally, 450mm vertically and staggered. To be at every block course vertically at all returns and reveals.

Internal finish to be 12mm render with gypsum plaster skim finish to give a 'U' value of 0.414W/mK

Internal Walls
To be 100mm blockwork constructed off a dpc off a foundation as indicated on plan

HOT WATER SYSTEM

A room thermostat or radiator valves are to be installed.

All pipes not contributing to useful heat requirements are to be insulated using an insulation material with a thermal conductivity not exceeding 0.45W/mk and a thickness equal to the external diameter of the pipe up to a max. of 40mm.

LINTELS

Lintels to be Catnic, or similar and equivalent, to have a min. 150mm end bearing and be installed in strict accordance with manufacturers instructions with a dpc cavity tray over where applicable.

Lintels over internal openings to be Catnic CN102 lintels unless specified otherwise.

Lintels to be protected with min. 15mm gypsum plaster skim finish to give a min. half hour fire protection.

FOUNDATIONS

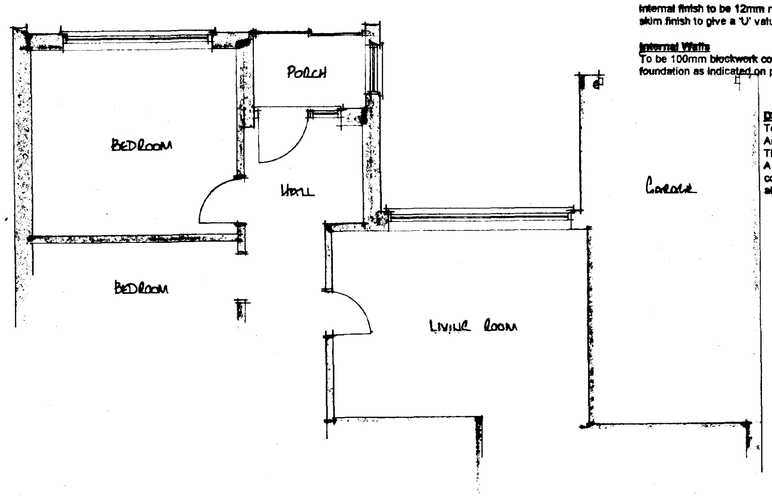
Foundations to be ST4 grade concrete

For 265mm walls foundations to be 700 x 230mm
For 100mm " " " 450 x 230mm

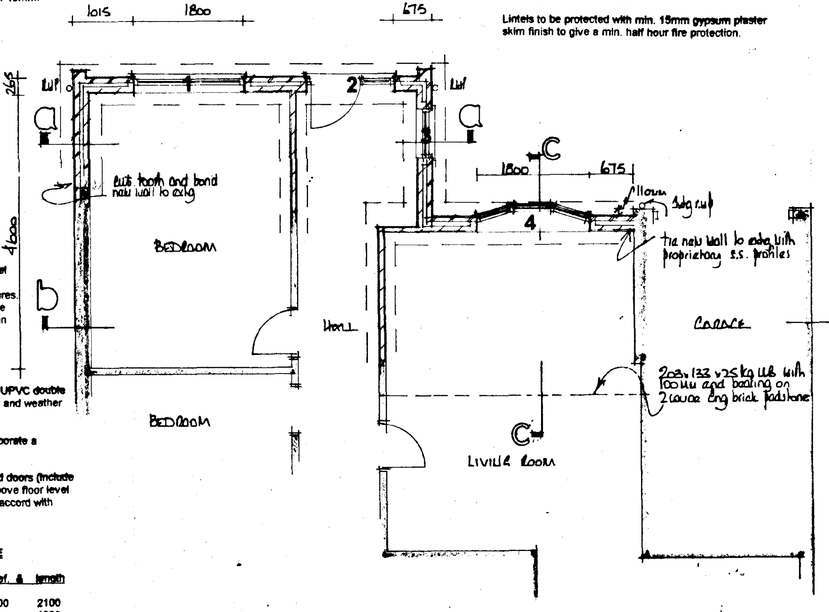
Foundations to be taken down to a firm loadbearing strata, a min. 1.0m if in shrinkable sub soil, in accordance with the requirements of the Local Authority Building Control Dept. and in accord with the NHBC guidelines for building near trees.
Site soil surveys are recommended in respect of foundations to establish specific site conditions before foundation work is undertaken.
Any investigation work relating to exig foundations should be carried out prior to the commencement of any works.

FLOOR CONSTRUCTION

Ground
65mm sand/cement screed reinforced with chicken wire mesh
500g polythene separating membrane
50mm Jablite SD floor insulation (k = 0.037W/m°C)
100mm ST4 grade ov/ersite concrete
1200g polythene damp proof membrane
25mm sand blinding
100mm compacted hard-core - if in excess of 100mm fill, to a max. 600mm, the hard-core is to be laid and compacted in layers not exceeding 150mm.
Strip off all vegetable soil beneath proposal.



existing



proposed

DPC in Walls
To be a min. 150mm above finished ground level
An insulating vertical cavity closer and dpc, i.e. Thermabate, is to be provided to all cavity closures.
A dpc cavity tray, stepped as applicable, is to be constructed within the wall immediately above an abutment.

WINDOWS & DOORS

Windows and doors to be purpose made UPVC double glazed with 20mm air gap to sealed units and weather stripped.

Windows to habitable rooms are to incorporate a controllable trickle vent of 8000mm

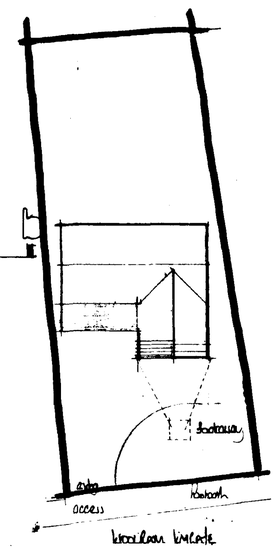
Glazing to windows less than 800mm and doors (include sidelights to doors) less than 1500mm above floor level is to be laminated or toughened glass in accord with BS6206 : 1981.

WINDOW/DOOR & LINTEL SCHEDULE

Location	window/door ref. Width x height	lintel ref. &	length
1	1800 x 1200	CG50/100	2100
2	extg door	"	1800
3	extg window	"	1200
4	1800 x 1350 bay window	"	2100

VENTILATION

All habitable rooms are to have windows containing opening vents, the combined total of which is equal to not less than 1/20th of the floor area of the room.



block plan

DETERMINED PLAN

A		
	Date	Revisions

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