ROOF CONSTRUCTION

The roof covering to be concrete interlocking tiles to a minimum of 75/100mm headlap and fixed with aluminium alloy clips to comply with B.S. requirements and manufacturers instructions on 50mm x 25mm treated wooden battens, set to required gauge. Reinforced P.V.C. sarking to B.S.747 type 1F is to cover the rafters allowing a minimum of 150mm overlap, horizontally and vertically and is to be taken over the fascia board, which is 38mm above rafters and carried into centre of gutter at eaves. A sprocket is fixed to prevent sagging behind fascia board. At hips and ridges the overlap shall not be less than 300mm nominal. Trussed rafters throughout set at 600mm centres and fixed to a 100mm x 50mm wallplate, secured with galvanised restraint straps at 1.2M maximum centres. Lateral restraint straps to be provided over first three trusses to rafter and ceiling tie members with noggins set between trusses and wall for additional stiffening and fixed to inner leaf at 2M maximum centres. The top tie is to be 450mm minimum from ridge. Bracing to roof to be to B.S.5268 Part 3 (1985). Calculations and truss design/construction for whole roof to be supplied by a specialist manufacturer at least 28 days before installation. Roof space over utility room and W.C. insulated by 270mm fibreglass blanket, consisting of 170mm across ceiling joists and 100mm between joists. Insulation to be continuous and to meet wall insulation to prevent cold bridging. Ceilings to be 12.5mm plasterboard and plaster skim. Roof ventilation to be provided by a continuous 25mm eaves ventilation strip with an equivalent gap at the ridge of 5mm.

At abutments No.3 lead soakers and No.5 lead stepped flashing is to be provided with upper horizontal edges of steps turned into bed and joints secured by lead wedges and pointed.

WALL CONSTRUCTION

305mm cavity wall (230 solid walls for garage and party walls), 102.5mm facing brickwork, 100mm cavity with 102.5mm thermalite 'shield' blockwork or equivalent and insulated with full fill rockwool/dritherm cavity bats to give 0.30 minimum 'u' value. Both leaves tied together with stainless steel butterfly type wall ties to B.S.1243 and used at a 750mm maximum horizontal and 450mm maximum vertical centres and at 225mm centres at reveals. All brickwork corner returns to be 665mm minimum external. Cavities to be closed around all new openings and D.P.C's to be incorporated. Insulation, D.P.C's and tray D.P.C's to be provided to all reveals using 'Thermabate' D.P.C. or equivalent. 2000 gauge D.P.C. to be 150mm minimum above finished ground level. Plaster skim internally. Footing blocks up to G.L. but terminate 150mm below D.P.C. Walls to be built in 102.5mm Class 'A' blocks to F.L. internally and Class 'B' engineering bricks to G.L. externally. The wall between the dwelling and garage is to be insulated using 75mm minimum 'Kingspan' insulation board or equivalent to give 0.35 minimum 'U' value and fitted in accordance with manufacturer's instructions and to the satisfaction of the Building Inspector. The dividing party wall is to be taken up to underside of tiles and firestopped.

GROUND FLOOR CONSTRUCTION

75mm sand/cement screed on 150mm 1:3:6/40 aggregate concrete floor slab on 2000 gauge visqueen D.P.M. lapped 150mm minimum at joints, which are to be taped to provide a radon barrier and turned up and tucked into mortar joint of outer leaf and linked to the D.P.C. which is 150mm minimum above G.L. 25mm sand blinding on well compacted limestone hardcore 150mm thick. Floor to be insulated by 65mm thick Styrofoam or 100mm polystyrene, with vapour barrier over insulation and 75mm screed over vapour barrier.

GARAGE FLOOR/BASE CONSTRUCTION

100mm 1:3:6/40 aggregate floor slab over 150mm thick well consolidated limestone hardcore. There is to be a minimum threshold of 100mm between the garage and dwelling floors.

FOOTINGS

All strip footings to be 600mm x 230mm 1:3:6/40 aggregate concrete, 760mm minimum below ground level (900mm in clay). Foundations to be taken completely below invert of existing drains to the satisfaction of the Building Control Officer.

WINDOWS

To give 1/10th lighting and 1/20th floor area ventilation. All windows to be of PVCu construction and double glazed with 16mm air gaps in the double glazed units with argon filling and a low 'E' coating to achieve 1.80 minimum 'U' value. All new windows to incorporate trickle vents of 8000 square mm minimum. All glazing below 800mm in windows and 1500mm in doors and windows within 300mm to be to B.S.6206. All safety glazing to be 'kite' marked.

LINTELS

To be provided over all door and window openings. All lintels galvanised steel with 150mm end bearings and tray D.P.C.s over. Calculations are to be provided at least 28 days before any work commences if required.

External walls - 'Catnic' type CN14

Garage wall – 'Catnic' CN81

Internal walls - 'Catnic' type CN6x (or as recommended by the Building Inspector).

All steelwork to have full half hour fire resistance using 25mm 'superlux' board or equivalent.

DRAINAGE

Sink wastes to be 50mm diameter pipes with 75mm deep seal traps discharging to new S & VP fitted with 'Durgo' air inlet valve. The existing S & VP is to be re-positioned to the rear of the dwelling and is to discharge 1M minimum above highest opening. Outlets to connect 203mm minimum from W.C. outlet and 450mm above rest bend. The terminal of any air admittance valve is to be situated above the flood level of any adjacent appliances (for internal use only).
Rodding eye tees provided where passing through walls for full rodding access. Additional ventilation is to be provided to the drainage system by the installation of an air admittance valve situated under the sink, or at the recommendation of the Building Inspector.
Drains to be re-laid in 100mm or 150mm flexible jointed pipes and encased in concrete where beneath or adjacent to the new building.
All drain runs to be constructed and tested to B.S. Codes of Practice, building drainage. All new drain runs to be 100mm diameter flexible jointed salt glazed earthenware or equivalent with falls of 1:40 minimum and bedded and surrounded in 150mm pea gravel. Foundation level to pass under all drainage. Concrete lintels to be used to bridge over all openings in foundation walls. Foundations to be taken completely below invert of existing drains to the satisfaction of the Building Control Officer.
Gutters to be 115mm diameter half round PVCu with 75mm diameter fallpipes.
Surface water to discharge to a soakaway 5M minimum from any building subject to a percolation test via 100mm diameter salt glazed drain or equivalent bedded and surrounded in 150mm pea gravel.

GENERAL

All work to be carried out at the discretion of the Building Inspector and comply with all relevant regulations.
ALL dimensions are to be checked and verified on site before any work commences.
All services installed to comply with all relevant regulations and to the satisfaction of the Boards concerned.
Any calculations are to be provided by a certified structural engineer or builder at least 28 days before work commences.
All electrical work is to meet the requirements of Part P (electrical safety) and must be designed, installed, inspected and tested by a person who is competent to do so.
Lighting to comprise of either basic lighting outlets or complete luminaries that only take lamps having a luminous efficiency greater than 40 lumens per circuit-watt.
Mechanical extractor fans capable of 30l/s minimum extraction are to be provided to the utility room and W.C.
Wall, floor and roof insulation is to be continuous to prevent cold bridges.
The extended central heating system is to be controlled by TRV's. All central heating pipes and storage vessels to be insulated to Part L1 of the Building Regulations. Tank supports to B.S. 5268.
The garage/dwelling door is to be an FD30s fire door and provide full ½ hour fire resistance and have intumescent seals and automatic closer.
Any air grates covered by the garage are to be sealed and equivalent fitted in adjacent walls.
A smoke and fire detection system with 3 interlinked smoke alarms down to a separate fuse is to be provided in accordance with B.S.5446 Part 1 (1990).
All features, fittings and ironmongery are to comply fully with all relevant regulations and codes of practice and at the discretion of the Building Inspector.
It is assumed that the builder is a competent tradesman, experienced in work of this nature and that all work is carried out to the highest quality with safety of paramount importance. All details and dimensions must be checked on site before any work commences and during construction,
Ryder Drawing Services accepts no responsibility for work that is not carried out to all relevant regulations and codes of practice and specifically to the requirements of the Building Inspector whether or not specified on the plans.