

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. 200mm x 50mm rafters throughout to be 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 rafters with noggins set between rafters and wall for additional stiffening and fixed to inner leaf at 2M maximum centres. The top tie is to be 450mm minimum from ridge. Calculations for WHOLE roof to be supplied by a contractor/installer at least 28 days before installation. Roof space insulated by 110mm Kingspan K10 insulation board or equivalent. 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.2

WALL CONSTRUCTION

305mm cavity wall, 102.5mm facing brickwork having a maximum U value of 0.23w/m²k, 100mm cavity with 102.5mm thermalite 'shield' blockwork or equivalent with a K value not greater than 0.11w/m³ and insulated with full fill dritherm 32 cavity bats. 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. The internal finish to be plasterboard on dabs.

FLOOR CONSTRUCTION

To be flooring grade chipboard or equivalent on 150mm x 50mm S.W. floor joists at 400mm centres supported off masonry joist hangers. Floor to be insulated using 140mm thick 'Styrofoam'. Floor ventilation to be 230mm x 150mm airbricks to suspended floor at 1M centres in external wall, boxed through cavity with tray D.P.C. over. Oversite construction to be 100mm concrete floor slab 1:3:6/40 aggregate over 150mm well consolidated limestone hardcore.

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.

DRAINAGE

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 existing drain or 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.

WINDOWS

To give 1/10th lighting and 1/20th floor area ventilation. All windows/doors 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. All windows to habitable rooms are to be escape windows with minimum clear openings of 0.33 square metres and minimum width and height dimension of 450mm. The sill heights are to be between 800mm and 1100mm from floor level to Approved Document B1 section 2.11.

LINTELS

To be provided over all door and window openings. All lintels galvanised steel with 150mm end bearing and tray D.P.C.s over.

External walls - 'Catnic' type CX 90/100

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.

GENERAL

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.

A smoke and fire detection system with interlinked smoke alarms down to a separate fuse is to be provided in accordance with B.S.5446 Part 1 (1990).

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.

Wall and roof insulation is to be continuous to prevent cold bridges.

All work to be carried out at the discretion of the Building Inspector and comply with all relevant regulations.

All dimensions must be checked on site before any work commences.

All services installed to comply with all relevant regulations and to the satisfaction of the Boards concerned.

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.

Ryder Drawing Services cannot guarantee under any circumstances that planning approval will be granted. The decision is entirely at the discretion of the local authority Planning Department in conjunction with all current regulations and codes of practice.