

Background ventilation of 8000sq/mm minimum to habitable rooms to be provided by means of trickle ventilators to windows.

#### FIRST FLOOR CONSTRUCTION

To be 50mm x 147mm joists @ 400mm centres with 1 row of herringbone strutting. Provide and lay 21mm chipboard flooring. Provide and fix to underside of joists 12.7mm thick plasterboard with 5mm thick thistle plaster finish. Floor joists to be doubled up where first floor partitions run parallel along line of floor joists. 100mm quilt insulation to be incorporated within floor construction.

#### ROOF CONSTRUCTION (Two Storey)

To be formed using standard gang nailed roof trusses to pitch shown on drawing, designed in accordance with B.S. 5268 parts 2 and 3, and fixed at 400mm centres. Minimum 100mm x 25mm longitudinal diagonal bracing to be twice nailed to each truss rafter.

All erection and bracing of roof trusses to be carried out in accordance with the recommendations of the international Truss Plate Association. Trusses to be fixed at 600mm centres together with any necessary proprietary galvanised truss cups, retaining straps and the like.

Interlocking concrete tile (to match existing) on 25 x 38mm treated softwood battens nailed to each truss with 65 x 3.5mm galvanised nails to BS 1202. Battens to be minimum 1200mm long and butt jointed with joints located centrally over face of trusses, no more than 4no joints to any truss. Tyvec breathable roofing felt to be laid over trusses with minimum 150mm laps. At eaves level, a continuous 15mm wide slot is to be provide to allow ventilation to the roof void.

Tyvec breathable roofing felt laid with minimum 150mm horizontal and vertical laps, carried well into gutters and fully supported at eaves with continuous tilting fillet so no troughs are formed.

150mm Celotex XR4000 insulation to be laid between ceiling joists, with a further 50mm GA4000 insulation to underside of joists give total insulation thickness of 145mm, 25mm batten to be fixed to underside of insulation to form an air gap between the insulation and plasterboard, all to achieve a 'U' value of 0.13Wm<sup>2</sup>/°K. A 50mm airgap is to be maintained over roof insulation and at eaves and a continuous 50 mm airgap is to be maintained behind or above fascia to allow ventilation to roof void in conjunction with high level roof vents.

Wallplates to be restrained by means of galvanised steel straps at maximum of 2m centres.

#### FIRST FLOOR PARTITIONS

To be 100mm x 50mm softwood heads, plates and studs at 400mm centres with 1 row of horizontal noggins. Provide and fix 1 layer of 9.5mm plasterboard both sides, finished with 5mm thistle plaster.

100mm quilt insulation to be incorporated within studwork.

#### ELECTRICAL INSTALLATION

New or works to existing electrical circuits or systems must be designed, installed, tested and certified to comply with the current editions of BS 7671 or the IEE Regulations by a competent person.

A competent electrician or a member of a competent person scheme must test and certify all such works. The electrician must provide signed copies of an electrical installation certificate conforming to BS 7671 for the owner of the property and a copy must be forwarded to the Local Authority Building Control Surveyor for approval at completion so as to allow the Building Control completion certificate to be issued.

All switches and sockets to be fixed between 450mm and 1200mm above floor level and accessible consumer units should be fitted with a childproof cover or installed in a lockable cupboard.

#### SMOKE DETECTION

To be mains operated with battery back up, installed to ground floor and first floor, heat detector to Kitchen. Location to be agreed with local authority Building Control Officer.

#### HEATING INSTALLATION

All new radiators installed to be fitted with thermostatically controlled radiator valves.

#### FIRE PROOFING TO STEEL BEAMS

To be formed with timber grounds or framework fixed to steel beams and 2 layers of 12.7mm plasterboard with staggered joints and finished with 5mm plaster skim

#### RAINWATER SOAKAWAY

Rainwater soakaway to be designed to BRE Digest 365. To be positioned minimum 5metres from property and minimum 5 metres away from any local authority highway. To be constructed as follows:-  
Size to be confirmed but anticipated as 1000mm wide x 1200mm long x 1000mm deep.  
Top of soakaway excavation to be set at invert level of incoming drainage pipe. Excavation to be lined with Teram or similar membrane and filled with clean rubble/hardcore. Soakaway to be topped with further layer of Teram/membrane and spoil reformed over construction as required.

#### CONSEQUENTIAL IMPROVEMENTS

Where an existing dwelling is extended or converted, as a result increasing the habitable area by no more than 10m<sup>2</sup>, if there is no loft insulation, or it is less than 200mm thick, provide 250mm of loft insulation.

Where an existing dwelling is extended or converted, as a result increasing the habitable area by more than 10m<sup>2</sup>, the following energy efficiency improvements should be undertaken:-

a). if there is no loft insulation, or it is less than 200mm thick, provide 250mm of loft insulation.

- b). If the dwelling has uninsulated walls or partially insulated cavity walls, fill with insulation where suitable).
- c). Upgrade any hot water cylinder insulation to provide 160mm insulated jacket to cylinder, or if cylinder has factory fitted foam less than 25mm thick them further insulate with 80mm insulated jacket