

19. All new openings in the external walls are to have adequately sized reinforced concrete or I.C. lintels over them with a suitable p.v.c. cavity tray where necessary and an adequate end bearing of 100mm for openings no more than 1000mm and 150mm for openings of a greater width.
20. All window reveals in the new external walls to be insulated to  $1.2\text{W/m}^2\text{C}$  and are to have vertical p.v.c. d.p.c's.
21. All cavity tie irons are to be DD140-2 Type 4 all made from austenitic stainless steel.
22. A p.v.c. damp proof course is to be provided in both the leafs of the external wall with that in the exterior leaf being at least 150mm above the finished exterior ground level.
23. The new 450 x 225 x 125mm Celcon thermal block wall on the ground floor between the garage and the utility room is to be built with a p.v.c. damp proof course at ground level, off a 300mm wide 150mm thick 1:2:4 concrete strip foundation formed in the proposed 100mm thick concrete floors that are reinforced with A142 mesh. A 100mm step up concrete threshold is to be provided between the garage and the utility room.
24. All cavities below the wall plates are to be closed with 12.5mm Superlux or similar.
25. The new suspended timber first floor is to be formed with 50 x 150mm floor joists at 400mm centres with mid point herring bone strutting hung off restraint type galvanised joist hangers secured to 50 x 150mm wall plates bolted to the walls covered with 22mm plywood or chipboard under drawn with 1No layer of 12.5mm plasterboard (2No layers in garage) having a 5mm plaster skim brought to a smooth finish having a layer of 100mm dense Rockwool sound deadening quilt in between the joists above the utility room (150mm Cosywrap above the garage) Floor joists are to be secured to the front and rear walls with 900 x 30 x 5mm bat straps at around 800mm centres spanning at least 3No joists.
26. All new window frames are to be white U.P.V.C. that satisfy the trickle ventilation regulations i.e. (strip  $8000\text{mm}^2$ ) or night ventilation catch all being double glazed having a U value of  $1.6\text{W/m}^2\text{C}$  using Pilkington Optitherm low-e-coated glass or the equivalent having a 16mm gap between the panes.
27. All glazing to the external and internal doors, along with that in any panels adjoining the doors and any less than 900mm below the internal floor level to be safety glazing or toughened glass compliant with BS6206
28. All habitable rooms are to have windows with an area equivalent to  $1/10^{\text{th}}$  of the floor area and an open able area equivalent to  $1/20^{\text{th}}$ .
29. All habitable rooms are to have escape windows with an aggregate area of  $0.33\text{m}^2$  with no dimension less than 500mm, a sill that is not less than 800mm above the floor level and not greater than 1100mm. Note that each first floor escape window will be accessible for ladder positioning.
30. The hip roof to the two storey gable addition having a pitch of approximately  $45^\circ$  is to be formed with a 50 x 175mm ridge board, 50 x 100mm rafters at 400mm centres birds mouthed on to the 75 x 100mm wall plates on the internal walls that are secured with bat straps at around 900mm centres and 50 x 10mm collar ties at around 800mm centres along with 2No 50 x 175mm hip rafters. The ceiling is to be formed with 50 x 125mm ceiling joists at 400mm centres and 1No 50 x 125mm binders under drawn with 12.5mm plasterboard having a 5mm plaster skim brought to a smooth finish, as shown on the plans. The ceiling joists are to be strapped back to the gable walls where possible with 30 x 900 x 5mm bat straps spanning at least three joists or rafters at around 900mm centres. The existing hip timbers including the rafters are to remain in position and the new valley gutter, which is to have a fall of around 1:60, is to be formed with 25mm thick boarding sitting on 50 x 100mm spars at 400mm centres and lined with 5lb lead flashing going back under the tiles at least 150mm concrete blocks and common concrete bricks.
31. The structure formed in item 29 above is to be covered with red tiles to match those on the main roof as closely as possible nailed with galvanized nails to the tanalised tile laths on breathable roofing felt fixed in accordance with the manufacturers specification. A continuous 25mm fascia ventilation strip is to be provided at the eaves.
32. The roof structure is to be insulated with a layer of 280mm Cosywrap quilt laid in two separate layers part between the ceiling joists and over the top of the ceiling joists between the binder.
33. An access trap the roof space is to be provided of around 450 x 600mm in size with double trimming joists in bedroom 4 with its cover being insulated with 280mm Cosywrap quilt or its equivalent.
34. A 208 x 102 x 36 universal beam shown as U.B. A on the plans, designed by the structural engineer is to be provided and fixed to support the wall above between bedroom 3 and the repositioned bathroom. The U.B. is to sit on a pair of 150mm deep concrete pad stones formed in accordance with the structural engineer's notes. (The steelwork calculations from the Structural Engineer are already in the possession of the Building Control Department.)
35. The UB provided and fixed in item 33 above is to receive two coats of red oxide prior to its installation and be encased in 15mm Fireline board having a 5mm plaster skim brought to a smooth finish.
36. The existing gable house wall that will become an internal wall is to have the roughcast render removed from it.
37. The existing gable house wall that will become an internal wall along with all the new internal block walls are to be covered with 9mm wall board spot fixed to the wall with an approved adhesive having a 5mm plaster skim brought to a smooth finish.
38. Fans capable of extracting at least 15 litres/second, of being operated intermittently and having an over run period of at least 15 minutes, venting to the external air are to be provided in the first floor modified bathroom, proposed en-suite shower room and ground floor cloak room.
39. The doors to the modified bathroom, possible en-suite shower room and ground floor utility room, if it has a sink unit are to have a 10mm gap at their bases.
40. The bath, shower and wash hand basin in the modified first floor bathroom, along with the wash hand basin and shower in the en-suite shower-room are to be fitted with anti-vac traps and 40mm waste pipes discharging into the new soil and vent pipe and soil pipe on the rear of the gable addition. All waste pipes are to have rodding access points at all changes in direction. The first floor w.c. in the en-suite shower-room is to discharge into the soil pipe and the one in the first floor modified bathroom is to discharge into the soil and vent pipe.
41. The existing cupboard off the landing may at sometime be converted into an en-suite shower-room to serve bedroom 1. If this is the case the specification for fan, the sanitary fittings, the pipe work and the drainage will be identical to that for the proposed en-suite shower-room serving bedroom 4.
42. The timber floor in the first floor modified bathroom beneath the bath is to be strengthened if this is found to be necessary.
43. All plumbing is to be carried out to BS5572 1978 by a Corgi registered or an equivalent engineer.
44. All the new stud partitions are to be constructed using 50 x 75mm timbers forming the studs and noggins at 600mm centres along with the sole and head plates. Studs to be insulated with a layer of 50mm Rockwell sound insulation and covered with 12.5mm plasterboard having a smooth 5mm plaster finish.
45. Any stud partitions that run parallel with the floor joists are to have double floor joists under them in all appropriate locations.
46. Linked mains smoke detectors having battery back up are to be fitted in the hallway and on the first floor landing along with a heat detector in the proposed kitchen and dining room.
47. The existing gas fired combination boiler located in the existing utility room is to be replaced with a suitably sized condensating one situated in the proposed kitchen/utility room or garden room to meet the increased demand for space heating and hot water.
48. All new radiators are to be fitted with Thermostatic Radiator Valves with the exception of one which will be controlled by a room thermostat.
49. The first floor ceiling height will be around 2450mm and that on the ground floor around 2480mm.
50. All cavities below wall plates and cills will be closed with 12.5mm Superlux or similar
51. Energy efficient light bulbs and appliances are to be used where ever possible.
52. All the new timber used on the job is to be SC 3 Grade.
53. A hood is to be provided over the cooker in the kitchen with a duct and an extraction fan to the external air capable of extracting at least 30 litres/second.
54. All new windows are to be light oak U.P.V.C. ones having permanent ventilation strips or night ventilation catches.
55. Adequate work tops along with a stainless steel sink unit, connected to all services are to be provided in the proposed kitchen.
56. All electrical works are to be carried out by a NICEIC accredited person.
57. All new power points will be positioned no lower than 450mm from the floor and all light switches no higher than 1200mm.
58. All external finishes are to match the existing as closely as is reasonably possible.
59. The external surfaces of all new solid concrete block walls are to be covered with a two coat and sand cement render having a roughcast finish to match the existing. Note that a bell bead is to be fixed at d.p.c. level where the render joins the artificial stone. Note that no render is to bridge the p.v.c. d.p.c.
60. Adequate mixed skips are to be provided for the duration of the works along with all necessary scaffolding erected in accordance with all Health and Safety requirements.
61. The site is to be left in a clean and tidy condition on completion with all of the surplus materials and rubbish being removed from the site for disposal in an environmentally friendly means.
62. All of the work is to be completed to the satisfaction of the Local Authority Building Control Officer, is to comply with all current Building Regulations and all other relevant Codes of Practice etc. - and to be carried out by competent tradesmen and their associates in a workmanlike and professional manner.

