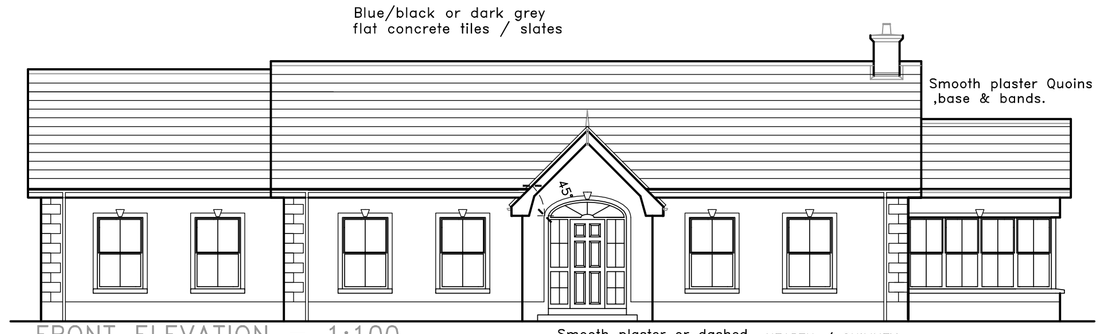


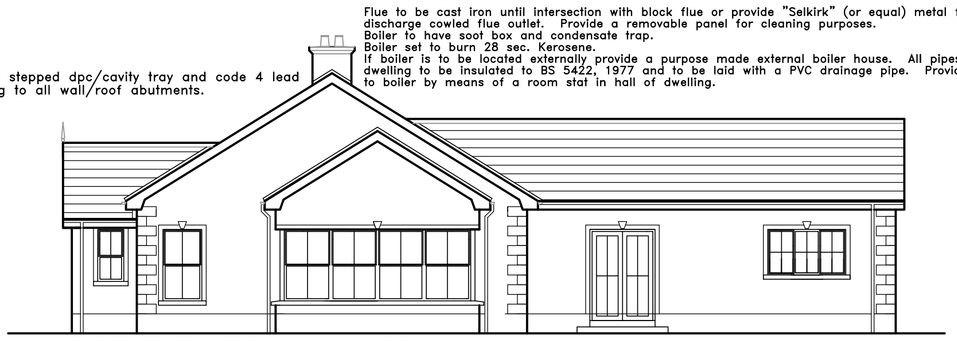
FRONT ELEVATION – 1:100

REAR ELEVATION – 1:100

BOILER NOTES

Flue to be cast iron until intersection with block flue or provide "Selkirk" (or equal) metal flue or a low level discharge cowled flue outlet. Provide a removable panel for cleaning purposes.
Boiler to have soot box and condensate trap.
Boiler set to burn 28 sec. Kerosene.
If boiler is to be located externally provide a purpose made external boiler house. All pipes between boiler and dwelling to be insulated to BS 5422, 1977 and to be laid with a PVC drainage pipe. Provide an anti-cycling device to boiler by means of a room stat in hall of dwelling.

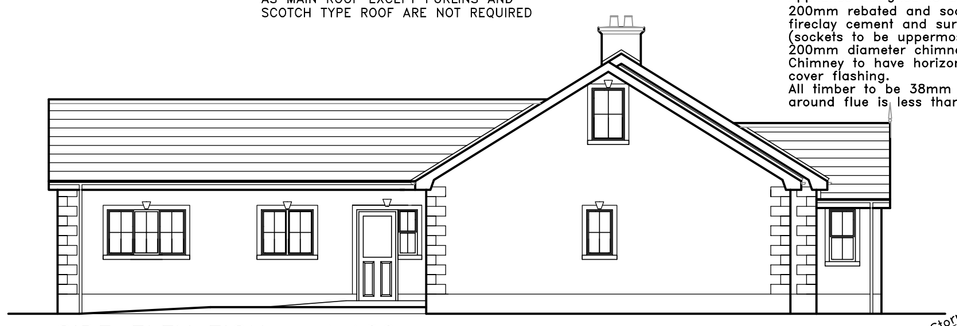
Provide stepped dpc/cavity tray and code 4 lead flashing to all wall/roof abutments.



SIDE ELEVATION – 1:100

ROOF OVER FRONT PORCH TO BE
AS MAIN ROOF EXCEPT PURLINS AND
SCOTCH TYPE ROOF ARE NOT REQUIRED

Smooth plaster or dashed
finish to walls



SIDE ELEVATION – 1:100

HEARTH / CHIMNEY.
125 constructional hearth ,to extend 500mm min. in front of recess / 200mm min. to either side of fireplace opening.
Appliance designed to burn smokeless fuel .
200mm rebated and socketed flueliners to BS 1181 set in fireclay cement and surrounded in a weak mix mortar (sockets to be uppermost)
200mm diameter chimney pot / RC coping on dpc.
Chimney to have horizontal lead tray / dpc ,soakers and cover flashing.
All timber to be 38mm clear of flue where brickwork around flue is less than 200mm

GENERAL NOTES.
All structural timber to be stress graded C16 (SC 3) or equal & be kiln dried (KD) and so marked on each timber member.
All external softwood to be pretreated against fungal attack.
Concrete to foundations,sub-floors,steps etc.to be 20N/mm
All steel beams to be set on RC.padstones and those acting as purlins to have a 100x50 SW. plate securely fixed to top flange.
Ensure all purlins have adequate blockwork to sides to ensure that ends are held in place.
3 No. consecutive joists and rafters/trusses to be securely fixed to adjacent wall with 30x5 galvanized metal straps at 2m.c/c's. Ends turned into wall a minimum of 75mm.
Provide bridgers and packers between timber members at position of straps.
Wallplates to be 100x50 vac-vac treated softwood bedded in mortar and tied to wall with 30x5 galvanized metal straps at 1.8m c/c's (max.)
Provide double rafters to each side of rooflights, dormers etc.
12.5 plasterboard & skim to ground floor ceilings and 9.5 plasterboard & skim to first floor ceilings.

PITCHED ROOF CONSTRUCTION .
Concrete ridge tiles /25 ridge board.
Concrete interlocking tiles or slates as selected .
38 x 25 sw battens.1 layer of reinforced roofing felt to BS747.
150 x 38 rafters at 400 c/c's.-purlin supports as specified on plan.
75 x 38 hangers avery other rafter / 75 x 38 runners .
150 x 38 ceiling joists at 400 c/c's. & plasterboard and skim ceilings. 100 x 50 wallplate securely fixed & strapped to wall.
25 fascia board & 9 soffit board. 100 HR. gutter
Ensure that rafter ends & joists ends are securely fixed together to ensure that roof triangulation is maintained.
All Valleys to have code 4 lead flashing on 200x25 valley liner boards. Ends of jack rafters to be fixed to 225x38 lay board laid on top of main roof OR fixed to 250x50 valley rafter.

ROOFSPACE INSULATION & VENTILATION.
100 mineral wool insulation between joists & 100mm over.
If any ceilings are sloping provide 100 polyurethane insulation between rafters & maintain a 50 mm air gap between insulation & underside of felt (batten underside of rafter if required) –
Provide 500 guage polythene vapour barrier between insulation & plasterboard ceilings.
Provide Glidevale (or equal) eaves ventilation equivalent to a 25mm continuous strip to all roofs & also ridge ventilation equivalent to a 5mm strip if between rafters is insulated.

DRAINAGE NOTES.
All drainage pipes to be 100mm diameter UPVC ,to be laid to BS4660, laid in and surrounded by granular pea bedding to manufacturers instructions (min fall 1 in 50)
Where pipes pass through wall ,blockwork to be supported on RC lintels.
Manholes to be built in 225mm brickwork ,properly benched and plastered on the inside and fitted with a metal airtight cover / PVC type ,laid to manufacturers instructions.
Where drainage pipes pass under dwelling they shall be surrounded in 150 mm granular filling.
Sink ,bath and whb wastes to be 38mm diameter.
WC waste (& all wastes below ground floors) to be 100mm diameter.
All first floor sanitory fittings to discharge into deep seal traps. Provide removable access panels to bath and shower waste traps.
100mm diameter soil and vent pipe, carried up to1m above window head ,terminating with ventilated cover.

GLAZING / VENTILATION.
All windows to be double glazed and have openings equivalent to 1/20th of floor area of room.
All glass in doors and sidelights up to 1500mm above floor level and in windows up to 800mm above floor level to be toughened or laminated to BS 6206.
Trickle ventilation – 8000mm² to habitable rooms , 4000mm² to kitchen,utility,bathroom,& sanitory accommodation.
Extract fans – 30 l/sec to kitchen & utility room , 15 l/sec. to bathrooms & ensuite (with 15 minute over run facility)
To minimise the risk of spillage of flue gases mechanical extract ventilation –
(a) shall not be provided in the same room as a solid fuel burning appliance.
(b) shall only be provided in the same room as an oil fired pressure jet appliance when the installation complies with OFTEC Technical information note TI/112
(c) extracting at a rate greater than 20 Litres/Sec,shall not be provided in the same room as gas fired appliance.

ACCESS & FACILITIES FOR DISABLED PEOPLE

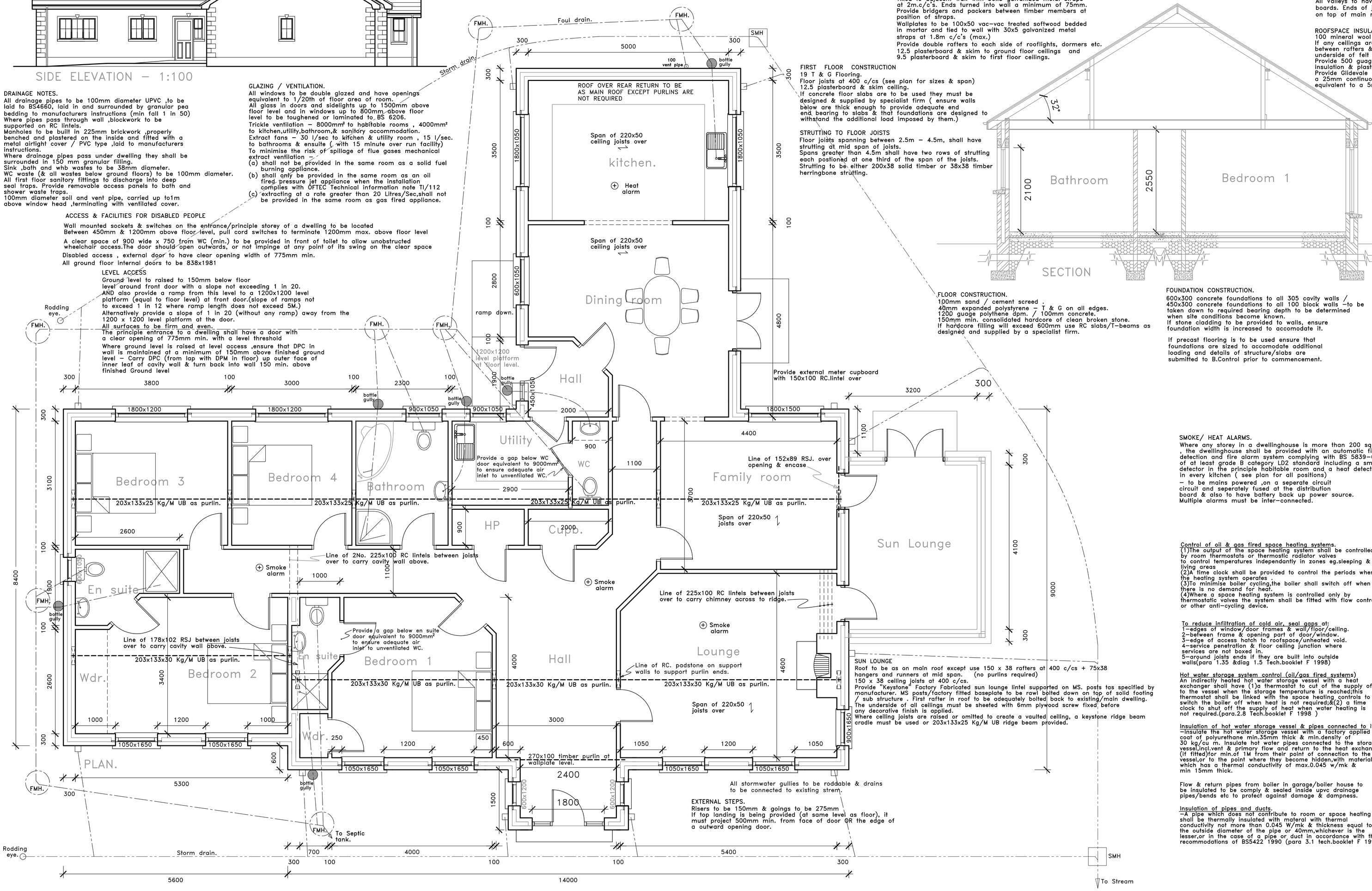
Wall mounted sockets & switches on the entrance/principle storey of a dwelling to be located Between 450mm & 1200mm above floor level, pull cord switches to terminate 1200mm max. above floor level

A clear space of 900 wide x 750 from WC (min.) to be provided in front of toilet to allow unobstructed wheelchair access.The door should open outwards, or not impinge at any point of its swing on the clear space

Disabled access , external door to have clear opening width of 775mm min.

All ground floor internal doors to be 838x1981

LEVEL ACCESS
Ground level to raised to 150mm below floor level around front door with a slope not exceeding 1 in 20.
AND also provide a ramp from this level to a 1200x1200 level platform (equal to floor level) at front door.(slope of ramps not to exceed 1 in 12 where ramp length does not exceed 5M.)
Alternatively provide a slope of 1 in 20 (without any ramp) away from the 1200 x 1200 level platform at the door.
All surfaces to be firm and even.
The principle entrance to a dwelling shall have a door with a clear opening of 775mm min. with a level threshold
Where ground level is raised at level access ,ensure that DPC in wall is maintained at a minimum of 150mm above finished ground level – Carry DPC (from lap with DPM in floor) up outer face of inner leaf of cavity wall & turn back into wall 150 min. above finished Ground level



FIRST FLOOR CONSTRUCTION
19 T & G Flooring.
Floor joists at 400 c/cs (see plan for sizes & span)
12.5 plasterboard & skim ceiling.
If concrete floor slabs are to be used they must be designed & supplied by specialist firm (ensure walls below are thick enough to provide adequate end end bearing to slabs & that foundations are designed to withstand the additional load imposed by them.)

STRUTTING TO FLOOR JOISTS
Floor joists spanning between 2.5m – 4.5m, shall have strutting at mid span of joists.
Spans greater than 4.5m shall have two rows of strutting each postioned at one third of the span of the joists.
Strutting to be either 200x38 solid timber or 38x38 timber herringbone strutting.

WALLS.
60mm expanded polystyrene to be securely fixed to outer side of inner leaf of cavity wall. – If blown in insulation is to be used , then it must be approved by building control.
Cavity to be filled / solid blockwork to ground level.
Cavity to be closed at wallplate level and gable ends with 12.5mm Supalux or equivalent.
Wall ties to be stainless steel to BS 1243 at 750mm c/c's horizontally,450mm c/c's vertically and at every course of blockwork at reveals.
Damp proof courses to BS 743 to be 150 (min) above finished ground level,bedded under all sills,vertically at window and door jambs and stepped over all lintels,ducts & pipes.
Provide 25mm rigid polystyrene insulation to backs of all sills and lintels and vertically at all window and door jambs.
Stud walls to be constructed from 75x38 timber framing with plasterboard and skim to either side.– If stud wall runs parallel with floor joists below provide 75mm thick trimmer under wall.
If brick finish is to be provided , then adjust dimensions to suit.

LINTEL SCHEDULE.
Openings up to 1200mm wide to have 150x100 RC lintel over with 1 No.12mm reinforcing bar.
Openings up to 2400mm wide to have 225x100 RC lintel over with 2 No.12mm reinforcing bar.
150mm (min) end bearing.
If opening are greater than 2.4m and R.C. lintels are being used , they must be prestressed and calculations obtained from the manufacturer if requested.
Where brickwork is being used provide Keystone/IG type steel lintel over.
Arched openings to have a Keystone/IG arched type steel or precast/stressed RC arched lintel over.
Manufacturer should be made aware of position,loading upon and use of all lintels so that they may be stressed accordingly prior to ordering.

FLOOR CONSTRUCTION.
100mm sand / cement screed .
40mm expanded polystyrene – T & G on all edges.
1200 guage polythene dpm. / 100mm concrete.
150mm min. consolidated hardcore of clean broken stone.
If hardcore filling will exceed 600mm use RC slabs/T-beams as designed and supplied by a specialist firm.

FOUNDATION CONSTRUCTION.
600x300 concrete foundations to all 305 cavity walls / 450x300 concrete foundations to all 100 block walls –to be taken down to required bearing depth to be determined when site conditions become known.
If stone cladding to be provided to walls, ensure foundation width is increased to accomodate it.

If precast flooring is to be used ensure that foundations are sized to accomodate additional loading and details of structure/slabs are submitted to B.Control prior to commencement.

SMOKE/ HEAT ALARMS.
Where any storey in a dwellinghouse is more than 200 sq.m. , the dwellinghouse shall be provided with an automatic fire detection and fire alarm system complying with BS 5839-6:2004 of at least grade B category LD2 standard including a smoke detector in the principle habitable room and a heat detector in every kitchen (see plan for all positions)
– to be mains powered ,on a seperate circuit circuit and seperately fused at the distribution board & also to have battery back up power source.
Multiple alarms must be inter-connected.

Control of all & gas fired space heating systems.
(1)The output of the space heating system shall be controlled by room thermostats or thermostic radiator valves to control temperatures independantly in zones eg.sleeping & living areas
(2)A time clock shall be provided to control the periods when the heating system operates .
(3)To minimise boiler cycling,the boiler shall switch off when there is no demand for heat.
(4)Where a space heating system is controlled only by thermostatic valves the system shall be fitted with flow control or other anti-cycling device.

To reduce infiltration of cold air, seal gaps at;
1–edges of window/door frames & wall/floor/ceiling.
2–between frame & opening part of door/window.
3–edge of access hatch to roofspace/unheated void.
4–service penetration & floor ceiling junction where services are not boxed in.
5–around joists ends if they are built into outside walls(para 1.35 &diag 1.5 Tech.booklet F 1998)

Hot water storage system control (oil/gas fired systems)
An indirectly heated hot water storage vessel with a heat exchanger shall have (1)a thermostat to cut of the supply of heat to the vessel when the storage temperature is reachedthis thermostat shall be linked with the space heating controls to switch the boiler off when heat is not required;&(2) a time clock to shut off the supply of heat when water heating is not required.(para.2.8 Tech.booklet F 1998)

Insulation of hot water storage vessel & pipes connected to it.
–Insulate the hot water storage vessel with a factory applied coat of polyurethane min.35mm thick & min.density of 30 kg/cu m. Insulate hot water pipes connected to the storage vessel,incl.vent & primary flow and return to the heat exchanger, (if fitted)for min.of 1M from their point of connection to the vessel,or to the point where they become hidden,with material which has a thermal conductivity of max.0.045 w/mk & min 15mm thick.

Flow & return pipes from boiler in garage/boiler house to be insulated to be comply & sealed inside upvc drainage pipes/bends etc to protect against damage & dampness.

Insulation of pipes and ducts.
–A pipe which does not confribute to room or space heating shall be thermally insulated with material with thermal conductivity not more than 0.045 W/mk & thickness equal to the outside diameter of the pipe or 40mm,whichever is the lesser,or in the case of a pipe or duct in accordance with the recommodations of BS5422 1990 (para 3.1 tech.booklet F 1998)

DIMENSIONS & LEVELS.
Figure dimensions to be taken in preference to those scaled.
All dimensions / levels to be checked by contractor before commencment of work and any irregularities to be reported.

All work to be carried out in accordence with current Health & safety regulations / procedures

If work commences on site prior planning/building control approval ,it is carried out at clients own risk.

E		
D		
C		
B		
A	8/12/06	amended for B.Control.

PROJECT
Dwelling & Garage.

CLIENT Mr. J.F. McLaughlin

LOCATION
120m. S.W. of 57 Grange Road, Toomebridge.

DESCRIPTION
Plan , section & elevations of dwelling.

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DATE	June 2006	SCALE	1:50/1:100
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