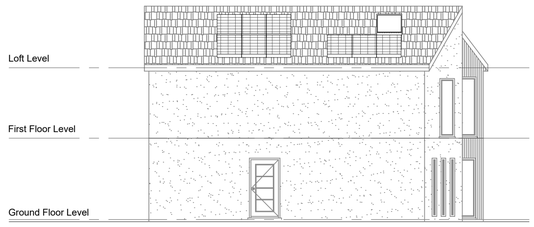
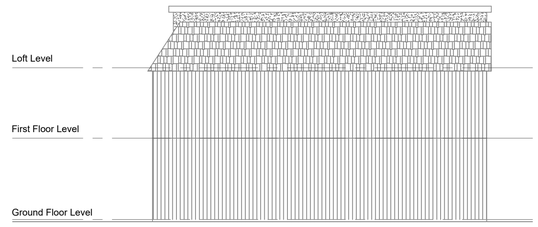
PROPOSED FRONT ELEVATION
(East)

PROPOSED REAR ELEVATION
(West)



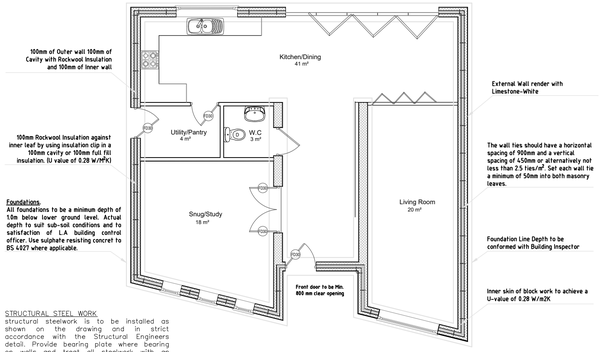
PROPOSED LEFT SIDE ELEVATION
(South)



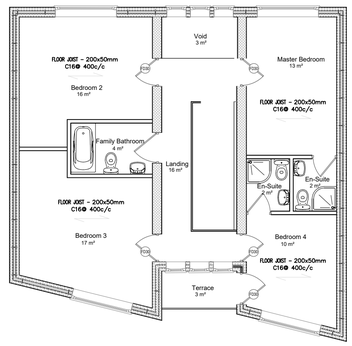
PROPOSED RIGHT SIDE ELEVATION
(North)

NOTES

1. ALL OPEN SECTION STEEL WORKS TO GRADE S275, ALL HOLLOW SECTION STEELWORKS TO BE GRADE S355, BLAST CLEANED TO SA2.5, PRIMED WITH ZINC PHOSPHATE PRIMER TO 75 MICRONS.
2. ALL CONCRETE TO FOUNDATIONS TO BE GEN 3 MIX, GROUND FLOOR SLAB TO BE GRADE C30 MIX.
3. CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY WORKS. ALL EXISTING STRUCTURE TO BE ADEQUATELY PROPPED PRIOR TO DEMOLITION. CONTRACTOR SHALL ENSURE THAT THE STABILITY OF STRUCTURE IS MAINTAINED THROUGH OUT THE CONSTRUCTION.
4. ALL DIMENSIONS TO BE CHECKED ON SITE PRIOR TO FABRICATION OF STEELWORK.
5. ALL STEELWORKS TO BE ENCASED IN 1.0 HOUR FIRE BOARD TO ARCHITECT DETAILS.

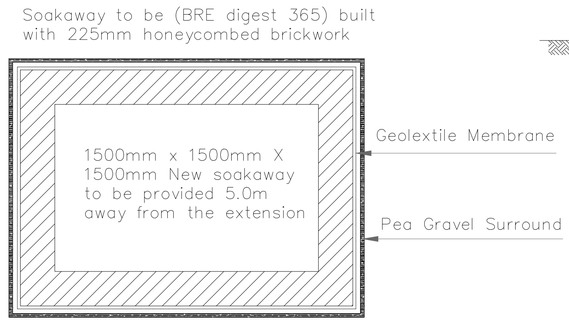


PROPOSED GROUND FLOOR FOUNDATION LAYOUT

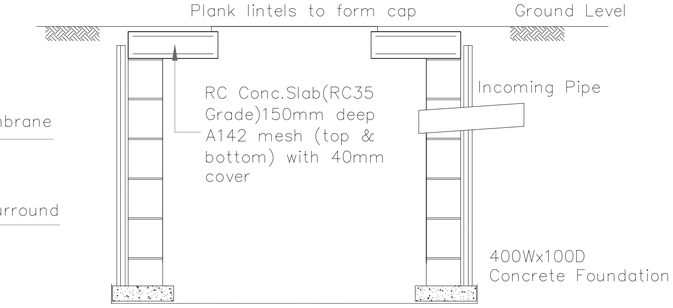


PROPOSED FIRST FLOOR LAYOUT

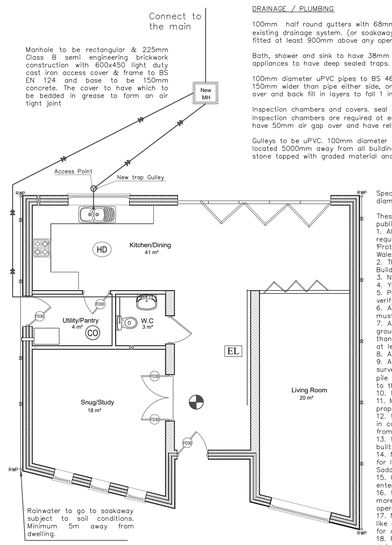
DRAINAGE / PLUMBING



Plan



Section



PROPOSED GROUND FLOOR DRAINAGE LAYOUT

DRAINAGE / PLUMBING

100mm half round gutters with 68mm dia downpipes to match colour and profile of existing and connected to existing drainage system. (or soakaway as noted on drawings) Soil vent pipe to terminate with Vent Terminal to be fitted at least 900mm above any opening within 3 metres. SVP to be cast iron.

Bath, shower and sink to have 38mm diameter waste pipe. Basin to have 32mm diameter waste pipe. All sanitary appliances to have deep sealed traps. All pipes to have rodding eyes at change of direction.

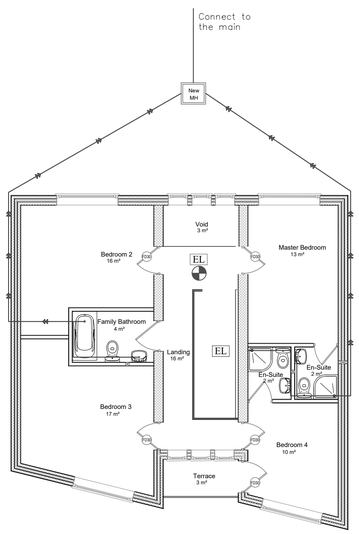
100mm diameter uPVC pipes to BS 4660, jointed according to manufacturer's instructions, laid in narrow trenches 150mm wider than pipe either side, on 510mm granular material, 150mm deep on firm base, with 100mm bedding over and back fill in layers to fall 1 in 60.

Inspection chambers and covers. seal cover is required over an open channel type manhole inside a building. Inspection chambers are required at each change of direction and gradient.) Pipes through walls / foundations to have 50mm air gap over and have relieving arch or pre stressed lintel over.

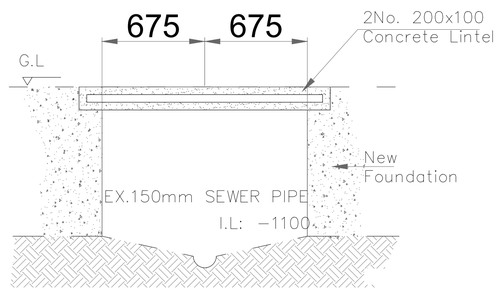
Gulleys to be uPVC. 100mm diameter outlet and back inlet. Hopper with 150mm PVC grating. Soakaway to be located 5000mm away from all buildings. 900 x 900 x 900mm deep back filled to 600mm depth with dry brick or stone topped with graded material and soil. Tested on completion.

Specifications for approved build over agreements – Sewers up to 160mm in diameter

These are our general guidelines when building within three metres or over a public sewer that is up to 160mm in diameter.
1. All new works must be done in like for like materials and comply with the requirements of the latest version of 'Sewers for Adoption', in conjunction with 'Protocol on Design and Construction of Adoption of Sewers in England and Wales'.
2. This consent is subject to any conditions that may be imposed through the Building Regulations process.
3. New dwellings are not permitted to be constructed over the public sewer.
4. Your proposed works must not transmit any additional loads to the sewer.
5. Prior to work starting on your site, it is your responsibility to check and verify the position of the public sewer and the depth of the bottom of the pipe.
6. Any sewers that are up to 1.1 metres deep, from ground level to invert, must run a minimum of 150mm away from the foundations.
7. Any sewers where the bottom of the pipe is more than 1.1 metres below ground level must run at least 500mm away from the foundations. If it is more than 2.0 metres below finished ground level, any proposed foundations must be at least 1.0 metre from the sewer.
8. All surveys carried out will be at the householder's expense.
9. Any piled foundations are subject to our approval and will require additional surveys to be carried out. They must be constructed a minimum of twice the pile diameter or 1.5 metres (whichever is greater) from the outside of the pile to the outside of the sewer.
10. We will not allow driven piles within 15 metres of a public sewer.
11. Manholes on the public sewer must not be built over or located inside proposed structures, even with new double-sealed bolt down covers.
12. Where the public sewer is up to 1.1 metres deep, no structure must be built in contact with the public sewer manhole, and must be a minimum of 150mm from the outside of the chamber wall.
13. Where the public sewer is more than 1.1 metres deep, no structure must be built within 500mm of the public manhole.
14. New connections on our existing sewer network must be constructed in like for like materials and should be via a manhole or a pre-formed junction. Saddle connections are not permitted on these sewers.
15. Connections into manholes must be made with soffit to soffit and must enter 'with the flow'.
16. We will not accept the public sewer being continuously built over for four or more properties in a row, without a suitable external manhole being available for operational access.
17. New manholes on our existing sewer network must be constructed in like for like materials and in line with the requirements of the latest version of 'Sewers for Adoption'.
18. Please note that sewers of this type are occasionally found to have minor defects such as misaligned joints (often since new) or hairline cracking. In such cases, we would accept the sewer as being in a serviceable condition.
19. We will only allow new plastic pipes and manholes where the existing sewers are constructed in plastic. All new plastic pipes constructed must be British Standards kite marked to BS EN 13476.



PROPOSED FIRST FLOOR DRAINAGE LAYOUT



BRIDGE DETAIL

Diameter of pipe must be no larger than 160mm. Granular surround must be no less than 150mm around the pipe. No loadings placed on top of the pipe from the proposed dwellings – for example, a lintel has been used in this case. Pipe to be at least 500mm away from parallel foundations. Pipe to be at least 150mm above the bottom of the foundations. Top of pipe to be at least 300mm from underside of floor slab

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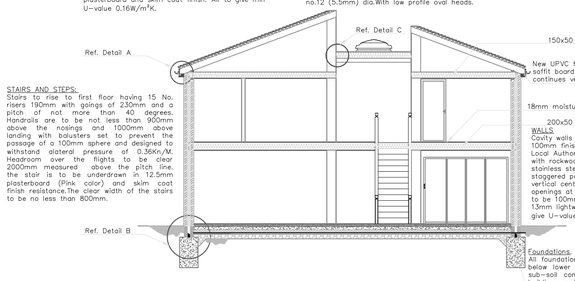
PITCHED ROOF.
All roof timbers to be tanalised. Roof tile to be laid on 38x25mm SW battens, onto Tyvek breather membrane or similar approved, onto 50x175 C24 120mm PIR Kingspan Thermo Pitch TP10 120mm insulation cut between and below 25mm insulation. Ensure min. 50mm air gap maintained over insulation, Tile vents to be provided through vent tiles as well as with vent eaves. Ceiling finish to comprise 12.5mm foil backed plasterboard and skim coat finish. All to give min U-value 0.16W/m²K.

FLAT ROOF (WARM ROOF)
Flat roof 13mm hot chippings hot bedded on 3 layers partially bonded felt incorporating the 3G based layer to BS747:2000. Vapour Control Barrier need to place above the 126mm Celotex TD4126 insulation, placed on firrings pieces fall 1:40 on 50x200mm joist at 400mm c/c (SC3 stress graded) the thermal roof TR31 Zero odd 100mm insulate thickness should be fixed with galavanized screw fixing that are a min. 12.5mm long, no.12 (5.5mm) dia.With low profile oval heads.

FLASHINGS AND CAVITY TRAYS
Flashings provided at all roof to wall abutments with Code 3 lead soakers and Code 4 lead flashings with minimum upstands of 150mm. Where applicable lead to be secured with wedges, clips and pointing. Cavity trays to be positioned above all lintels and openings, stepped at roof abutments with stop ends and weepholes at 450mm c/s. over openings.

The contractor is to ensure that all materials comply with the reverent British Standards and have current Agreement Certificates. All products fitted strictly in accordance with manufacture's instruction



PROPOSED SECTION DETAIL PLAN

STAIRS AND STEPS:
Stairs to rise to first floor having 15 No. risers 190mm with goings of 230mm and a pitch of not more than 40 degrees. Handrails are to be not less than 900mm above the nosings and 1000mm above landing with balusters set to prevent the passage of a 100mm sphere and designed to withstand alateral pressure of 0.36Kn/M. Headroom over the flights to be clear 2000mm measured above the pitch line. the stair is to be underdrawn in 12.5mm plasterboard (Pink color) and skim coat finish resistance.The clear width of the stairs to be no less than 800mm.

WALLS
Cavity walls having an outer leaf of block work 100mm finish with Limestone-White render to Local Authority approval, 100mm cavity insulated with rockwool cavity wall insulation batts with stainless steel safety cavity wall ties spaced staggered pattern at 900mm horizontal and 450 vertical centres with additional ties at revels of openings at 300mm centres. The internal leaf is to be 100mm Thermalite shield blocks with 1.3mm lightweight plaster finish internally.Wall to give U-value 0.28W/m²K.

WINDOWS:
All windows to be comply with Integral background trickle ventilation equal to 8000mm2 per habitable room or 4000mm2 to kitchen and bathrooms.
All windows to be operable as indicated on drawings with opening to ground &first floor.
All windows to be provided with "easy clear" hinging to allow cleaning of external panes from inside.Opening lights to achieve clear opening 5% of the floor area to habitable rooms. Glazing shall be by factory sealed vacuum double glazed units to provide max. U- value of 1.3W/m2K (when required,low emissive will be incorporated) All glazing below 800mm from finished floor level for windows (or adjacent to or within 300mm of doors), must be toughened glass. This will also apply to all doors and sidelights where glazing is 1500mm and below from finished floor level.
To limit air leakage around door and window frames , in continuous ribbon of mastic sealing is to applied to both the front and back frames.
Windows shall be installed to suppliers specific instructions.
Windows shall be provided locking fasteners to all opening lights, with two fasteners to windows of 1350 mm in height or more.

Foundations.
All foundations to be a minimum depth of 1.0m below lower ground level. Actual depth to suit sub-soil conditions and to satisfaction of L.A building control officer. Use sulphate resisting concret to BS 4027 where applicable.

FIRE DETECTION SYSTEM
Fire Brigade approved. Smoke Detectors to be fitted at each level and wire to a separately fused circuit at distribution board to BS :5446,Part 1 1990, to IEE Wiring Regulation an to Manufacture's recommendations.Heat detectors to be fitted in Kitchens and interlinked to smoke detector system as indicated on the drawings. Occupiers to receive Manufacture's instructions concerning operation and maintenance.
Senor to be sited a minimum 300mm from any wall and light fittings.

SMOKE AND HEAT DETECTOR
Fire Brigade approved. Smoke detectors to be fitted at each level and wired to a separately fused circuit at distribution board to BS:5446,Part 1 2004, to IEE Wiring Regulation and to Manufacture's recommendations. Heat detectors to be fitted kitchens inter linked to smoke detection system.Occupiers to receive manufacture's instructions concerning operation and maintenance.

PLUMING
Provide 75mm deep seal traps to all fittings and connect to soil stacks encased to half hour fire resistance standard where shown in timber framing and 12.5 plasterboard and skim coat finish. Soil and vent pipes to be minimum 100mm diameter. Wastes to baths 38mm diameter,showers 50mm diameter, basins and sinks 38mm diameter.Cleaning eyes to be provided at base of stacks and all changes of vertically and 300mm horizontally from head of adjacent windows.

RAIN WATER GOODS
Rainwater to go to soakaway subject to soil conditions. Minimum 5m away from dwelling.
100mm half round gutters to fascia at min 600mm ctrs on brackets with all joint brackets, running outlets and stop ends as appropriate. fascia board and dormer cheeks within 1000mm boundary to be non-combustible materials.
65mm round down pipes fixed to wall at 1500mm Max' ctrs with screws plugged into brickwork not mortar. .Ensure 6mm expansion gap at joints in down pipe. Include offset bends, pipe connectors and branches as necessary. Base of rainwater pipes connected direct into trapped vertical inlet gully. (access gully).

WINDOWS & GLAZING.
Double glazed window--average u value 1.8 w/m sq deg cen. Double glazed upvc window to have 16mm air gap.
Secondary glazing system is sepcified for other elevations- refer to Elevations.
- Where secondary glazing is being installed, the glass used should be at least 4mm thick, unless the pane is larger than 1.8 metres, when 6mm glass should be used.
- Safety glass should be used, in accordance with BS 6262:1994: Part 4, whenever:
- the glass is less than 800mm from the existing or proposed finished floor level (FFL), or
- the glass in doors and adjacent windows is within 300mm of doors to a height of 1500mm above FFL.
- Glass and Guarding : For new buildings and those undergoing major refurbishment, the building regulations Part K (England and Wales), Part S (Scotland) and Part H (Northern Ireland) must be observed and this may, in certain circumstances, affect specifications for the secondary windows.
- Panel Size : Small panels are better if the windows are to be used regularly, particularly when the intended users are elderly or frail.
- Large panels may be used on windows that require only occasional access, e.g. those within an air-conditioned building.
- An aluminium-framed panel containing 4mm glass will weigh approximately 12kg per square metre, with 6mm glass, 17kg per square metre and with 11.5mm laminate, 29kg per square metre.
- Where panels have to be removed for cleaning or access, a full manual handling assessment must take place. Depending on who will be using the secondary windows, this could affect their design.
- Access : The window design should take into account access for the safe handling of materials, both while the secondary glazing is being installed and during its future maintenance.
All glazing to accord with the requirements of Part N of the Building Regs and in terms of safe breakage, comply with the requirements of Classes B and C of BS6206:1981

LINTELS
Insulated catnic lintel or similar approved to be used in accordance with the manufactures details. Lintel to have end bearing both sides of 150 mm catnic lintel to be fitted with stop end to cavity tray. For size please refer to the structural engineers details.
Lintels in external cavity walls to be IG Lintels L1 type or as schedule and unless noted otherwise, complete with cavity tray DPCs, stop ends and weepholes, (minimum two weepholes per opening or max 450mm c/c).
Lintels in internal load bearing walls to be IG Lintels Box type or as schedule. End bearings to all lintels to be minimum 150mm on full mortar beds. Refer to Structural Engineer's documentation for steel beam sizing, bearings, padstones and calculated justifications. Encase all exposed steel beams in 2 layers 15mm duplex fireline board and skim.
Steel beams above windows to str. eng's details

LIGHT FITTING
In the affected by the building work provide low energy light fittings(fixed lights or lighting units) that number not less than three per four of all the light fittings in the main dwelling spaces of those areas (excluding infrequently accessed spaces used for storage, such as cupboards and wardrobes)

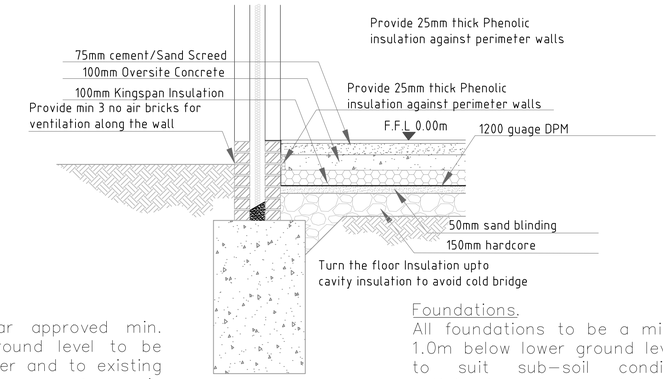
Low energy light fittings should have lamps with a luminous efficacy greater than 45 lamp lumens per circuit-watt and a total output greater than 400 lamp lumens.

Light fitting whose supplied power is less than 5 circuit-watts are excluded from the overall count of the total number of light fittings Fix minimum of 75% energy Efficient light fitting

DPCs
Polyethylene DPCs with gripped surface to BS.6515 to be laid a minimum of 150mm above finished ground levels or where detailed on sections and below bearing of concrete floor beams. DPC to be raised around Port M access points to maintain 150mm above finished ground levels.

EXTERNAL WALL CONSTRUCTION
300mm overall cavity construction outer skin 100mm 7N/mm2 block and inner skin min. 3.5 N/mm2 below ground level with 102mm engineering brick to the foundation level.
Cavity to be filled solid with lean mix concrete to four courses below DPC level and struck towards the outer skin. Cavity to be filled with Rockwool tuty fill cavity insulation to achieve a minimum 'U' value of 0.3 W/m²K. Cavity walls are to be tied using stainless steel wall ties to BS.1243 1978 at 900mm centres horizontally and 450mm vertically (225mm at jambs of openings). All cavities to be closed at openings with insulated formers to windows and blockwork returns with Thermabate or equivalent insulated DPC's to doors. Provide cavity closer to
top of all cavities. Provide concrete padstones below all multiple roof trusses and steel beams where required by Structural Engineer. All cavities to be kept clean and free from mortar droppings.
All external render area to have junction beads in stainless steel i.e. bell cast render stops, external corners and movement joints etc. All as per manufacturer's recommendations.

WALLS
Cavity walls having an outer leaf of block work 100mm finish with Limestone-White render to Local Authority approval, 100mm cavity insulated with rockwool cavity wall insulation batts with stainless steel safety cavity wall ties spaced staggered pattern at 900mm horizontal and 450 vertical centres with additional ties at revels of openings at 300mm centres. The internal leaf is to be 100mm Thermalite shield blocks with 13mm lightweight plaster finish internally.Wall to give U-value 0.28W/m²K.

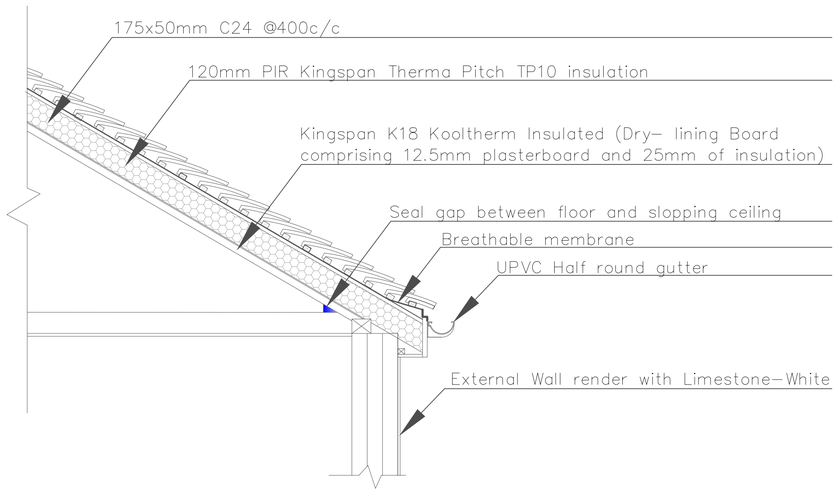


DPC's.
To be 'Hyload' or similar approved min. 150mm above finished ground level to be lapped and bonded together and to existing DPCs in accordance with manufacturer's instructions.

Foundations.
All foundations to be a minimum depth of 1.0m below lower ground level. Actual depth to suit sub-soil conditions and to satisfaction of L.A building control officer. Use sulphate resisting concret to BS 4027 where applicable.

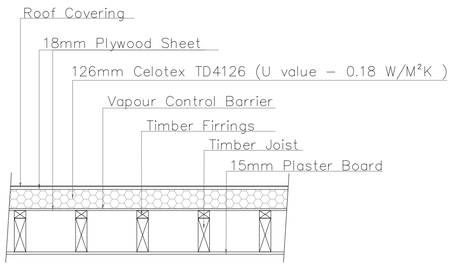
Foundation Detail B

Scale 1:20

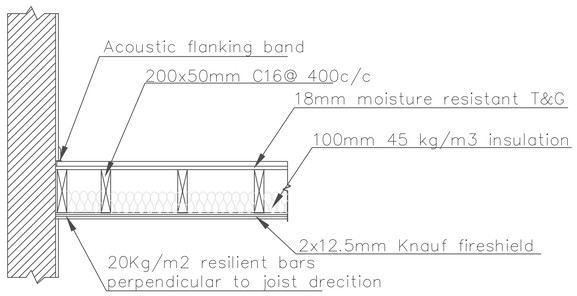


Pitch Roof Detail A

Scale 1:20

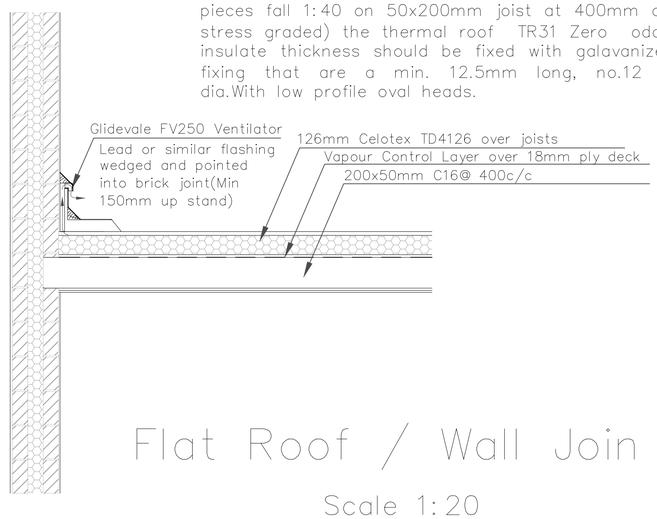


Warmdeck Details



Floor detail

Scale 1:20



FLAT ROOF (WARM ROOF)
Flat roof 13mm hot chippings hot bedded on 3 layers partially bonded felt incorporating the 3G based layer to BS747:2000. Vapour Control Barrier need to place above the 126mm Celotex TD4126 insulation, placed on firrings pieces fall 1:40 on 50x200mm joist at 400mm c/c (SC3 stress graded) the thermal roof TR31 Zero odd 100mm insulate thickness should be fixed with galavanized screw fixing that are a min. 12.5mm long, no.12 (5.5mm) dia.With low profile oval heads.

Flat Roof / Wall Join detail

Scale 1:20

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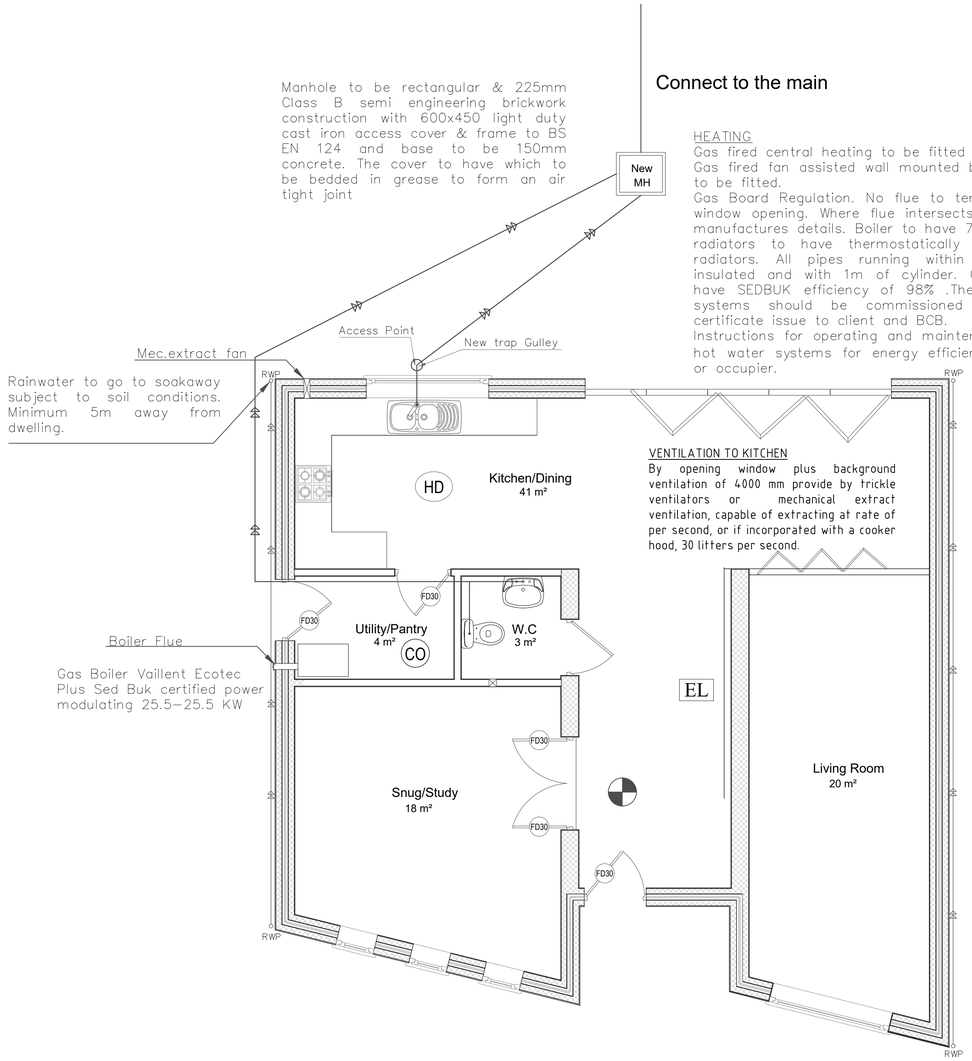

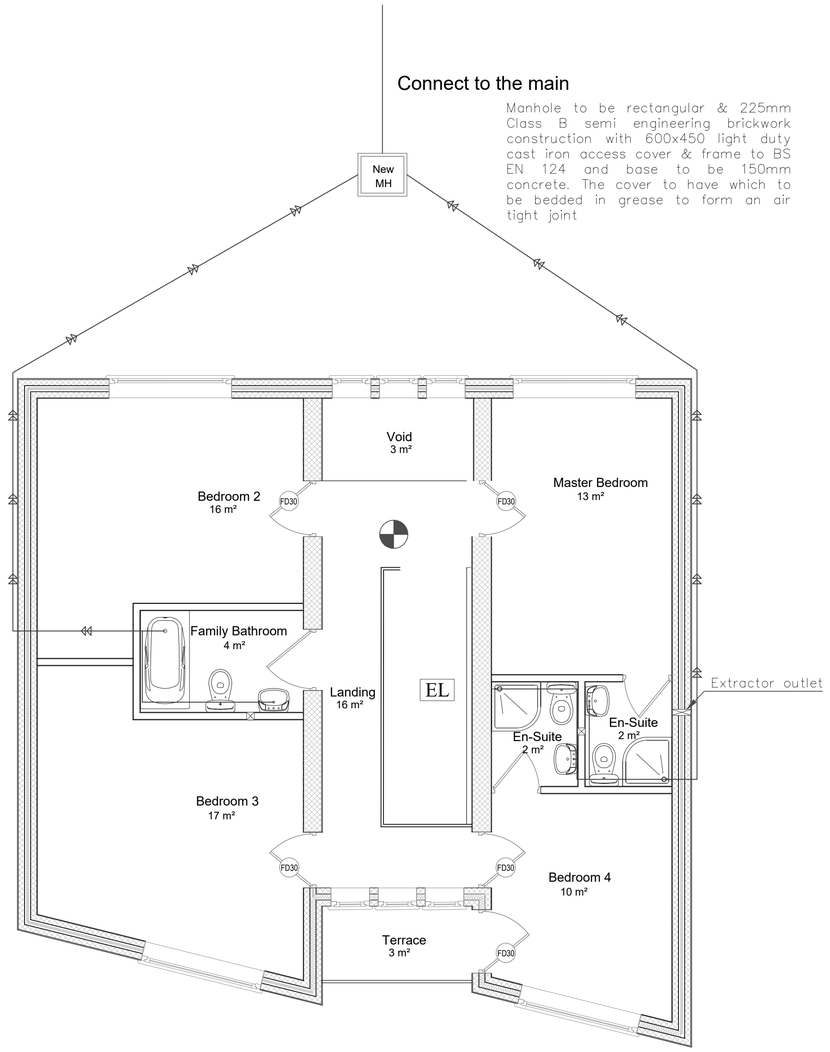

PROPOSED GROUND FLOOR
FIRE REGULATION & DRAINAGE LAYOUT

PROPOSED FIRST FLOOR
FIRE REGULATION & DRAINAGE LAYOUT

HEATING

Gas fired central heating to be fitted by an approved installer. Gas fired fan assisted wall mounted boiler with flue and guard to be fitted.
Gas Board Regulation. No flue to terminate within 300mm of window opening. Where flue intersects roof, to be installed to manufactures details. Boiler to have 7 day electronic timer and radiators to have thermostatically controlled valves to all radiators. All pipes running within unheated areas to be insulated and with 1m of cylinder. Central Heating Boiler to have SEDBUK efficiency of 98% .The heating and hot water systems should be commissioned at completion and a certificate issue to client and BCB.
Instructions for operating and maintenance of the heating and hot water systems for energy efficiency given to owner and/ or occupier.

FIRE PROTECTION

All steel beams and lintels unless supporting roof construction to be encased with two layers of 15mm plasterboard and skim with joints staggered on minimum 32x32mm sw framing to achieve minimum half hour fire resistance.

Recessed downlighters fitted to ceilings to be fitted with half hour intumescent fire hoods within floor or roof voids.

All service penetrations i.e. pipe work or cabling etc. less than 50mm diameter passing through compartment walls or compartment floors to be fire stopped with intumescent mastic. Pipe work greater than 50mm diameter i.e. soil pipes to be fitted with intumescent fire collars to BS476, and wrapped with minimum 25mm mineral wool insulation over the entire length.

ELECTRICAL SAFETY

All wiring and electrical work will be designed, installed, inspected and tested in accordance with the requirements of BS7671, the 16th edition Wiring Guidance and Building Regulation Part P (Electrical Safety) by a competent person registered with an electrical self –certificate scheme authorized by the Secretary of State (BRE,BSE,ELECSA, NAPIT or NICEIE).
The competent person is to send to the local authority.
The competent person is to send to local authority a self– certification certificate within 30 days of completion of the electrical works. The client must receive both a copy of the self – certification certificate and a BS7671 Electrical Installation Test Certificate and forward copies to Building Control.

According to Part G Legislation April 2010 ,comply with BS EN 1111 and BS EN1287 the hot water supply temperature to a bath , shower and sink should be limited to maximum of 35° to 48°C by use of an in–line blending value or other appropriate temperature control device, with a maximum temperature stop and a suitable arrangement of pipe work

Smoke and Heat detector:

Fire Brigade approved. Smoke detectors to be fitted at each level and wired to a separately fused circuit at distribution board to BS: 5446,Part 1 2004, to IEE Wiring Regulation and to Manufacture's recommendations. Heat detectors to be fitted kitchens inter linked to smoke detection system. Occupiers to receive manufacture's instructions concerning operation and maintenance.

HD

Heat detector:

Positions are marked on the Drawings.
Sensor to be sited a minimum of 300mm from any wall and light fitting. Mians connected, interlinked and battery back up.All in accordance with Building Regulations and relevant British Standards.

Smoke detector

Positions are marked on the Drawings.
Sensor to be sited a minimum of 300mm from any wall and light fitting. Mians connected, interlinked and battery back up.All in accordance with Building Regulations and relevant British Standards.

EL

Emergency Light

Positions are marked on the Drawings.
To BS: 5266 Part 1 1988, to be approved to all common staircase routes in case the mains supply fails(inculding staircase and corridors). Lighting to escape stairs to be on a separate circuit from that supplying any other part of the escape route.

FD30 Fire resisting door – 30 Minute Integrity

CO

Carbon Monoxide alarm in every room containing a solid fuel burning appliance. carbon monoxide alarms should be positioned at head height, either on a wall or shelf, approximately 1 to 3 meters away from a potential source of carbon monoxide

DRAINAGE / PLUMBING

100mm half round gutters with 68mm dia downpipes to match colour and profile of existing and connected to existing drainage system. (or soakaway as noted on drawings) Soil vent pipe to terminate with Vent Terminal to be fitted at least 900mm above any opening within 3 metres. SVP to be cast iron.

Bath, shower and sink to have 38mm diameter waste pipe. Basin to have 32mm diameter waste pipe. All sanitary appliances to have deep sealed traps. All pipes to have rodding eyes at change of direction.

100mm diameter uPVC pipes to BS 4660, jointed according to manufacturer's instructions, laid in narrow trenches 150mm wider than pipe either side, on 510mm granular material, 150mm deep on firm base, with 100mm bedding over and back fill in layers to fall 1 in 60.

Inspection chambers and covers. seal cover is required over an open channel type manhole inside a building. Inspection chambers are required at each change of direction and gradient.) Pipes through walls / foundations to have 50mm air gap over and have relieving arch or pre stressed lintel over.

Gulleys to be uPVC. 100mm diameter outlet and back inlet. Hopper with 150mm PVC grating. Soakaway to be located 5000mm away from all buildings. 900 x 900 x 900mm deep back filled to 600mm depth with dry brick or stone topped with graded material and soil. Tested on completion.

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