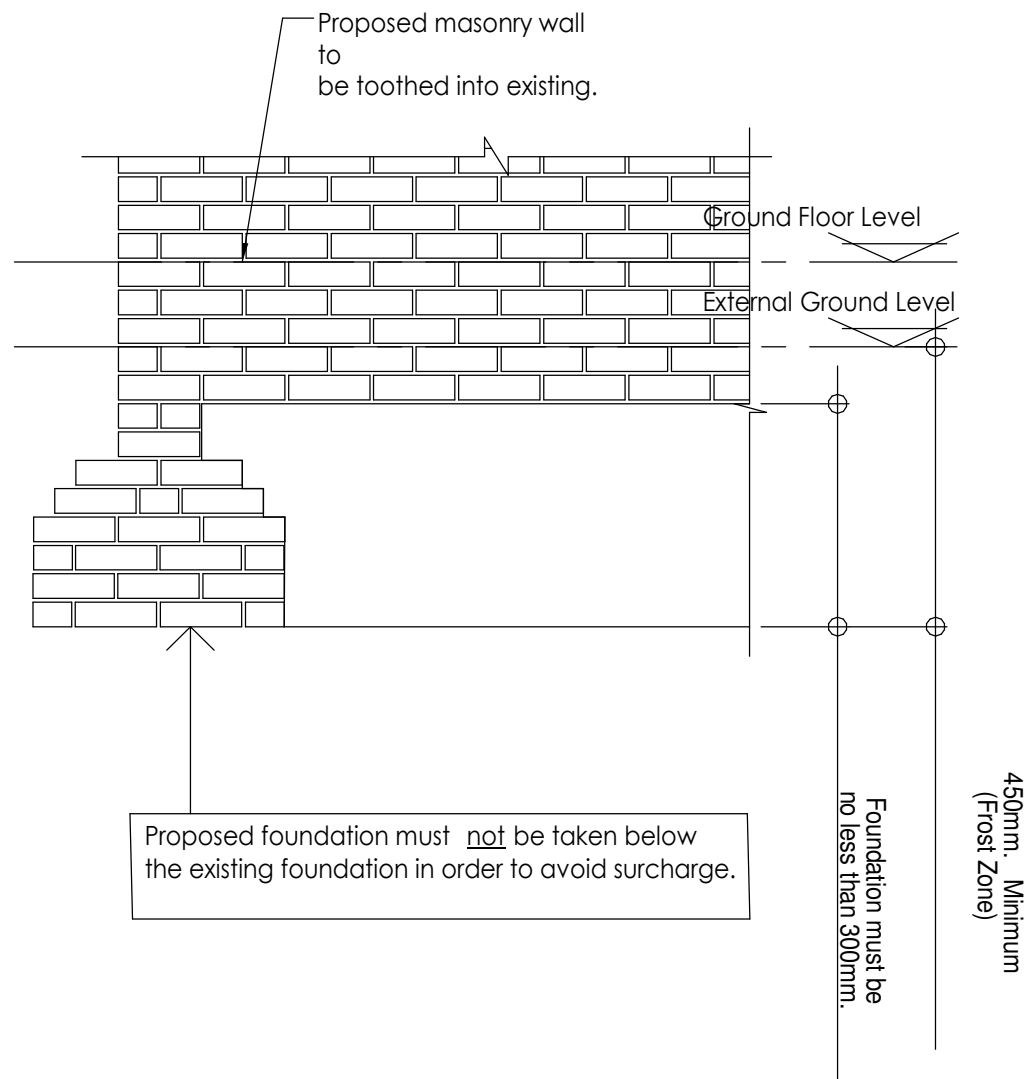
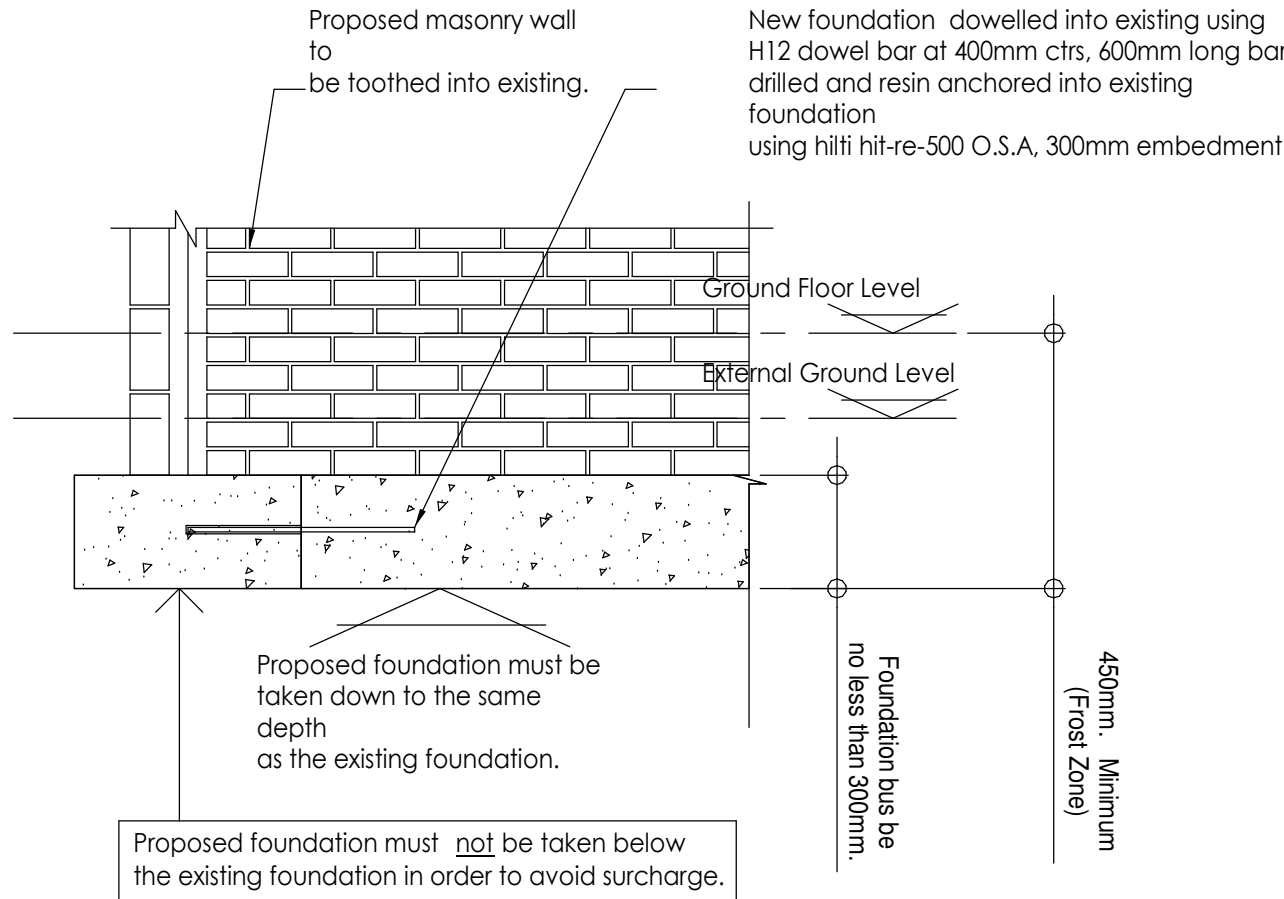




(DETAIL 1)
(Scale 1:20)



(Option 2)
(Scale 1:20)

This foundation detail is to be used if a concrete strip footing is encountered

1 FOUNDATION DETAIL A

1 : 20

SUSPENDED GROUND FLOOR SLAB. (TIMBER CONTRUCTION)

150 X 47mm C24 Timbers @ 400c/c with 22mm moisture resistant chip board and 120mm Ecotherm Eco versal. A movement gap of 3mm should be provided to the chipboard to all perimeter. Noggins and straps should be provided to all unsupported edges. . Floor joist to be supported on joist hangers.150mm sub-floor void, to be vented using telescopic vents at minimum 1.2m cts to ensure cross ventilation, all to achieve a maximum permissible U-value of 0.18W/m K. Ground to receive a minimum of 50mm concrete cover. Should there be present of gas the appropriate protection measures should be installed. Building Inspector to confirm requirements.

Should the presence of gas or other contaminants found on site necessitate the inclusion of an impermeable membrane then this will be placed below the slab.

FLAT ROOF-To achieve U value of 0.15 W/m²K

A warm roof constructionwith 18mm plywood, vapour barrier, 130mm Ecotherm Eco torch PIR insulation, weatherproof chipboard with GRP Resin.

LEAD WORK AND FLASHINGS

All lead flashing, and soakers to be code 5 lead and laid according to lead development association Flashings to be provide below all jambs and window openings and welded upstands. Joints to be lapped a minimum of 150mm and lead to be dressed 200mm below tiles. both sides with rigid sheet material and compressible sealant to prevent.

WALLS BELOW GROUND

All walls to have Class A blockwork below ground level or alternatively semi engineering brickwork in 1:4 masonry cement or equal approved specification. Cavities below ground level to be filled with lean mix concrete min 225mm below damp proof course. Or provide lean mix backfill at base of cavity wall (150mm below damp course) laid to fall to weepholes.

CAVITY WALLS -PERIMETER WALL CONSTRUCTION (ABOVE GROUND):

WALLS

To achieve traditional u value of 0.17w/m²k

To consist of 100mm dense medium blockwork with 90mm Kingspan Kooltherm K106 cavity board, 10mm clear residual cavity, 100mm medium block, 3mm skim coated 12.5mm plasterboard on dabs.

ELECTRICAL

All electrical work required to meet the requirements of part P (electrical safety) must be designed, installed, inspected and tested by a competent person registered under a competent person self-certification scheme such as BRE certification Ltd, BSI, NICEIC Certification services or Zurich Ltd. An appropriate BS7671 Electrical installation Certificate is to be issued for the work by a person competent to do so. A copy of a certificate will be given to building control on completion.All the height of switches and sockets are to be compliance with part M of the building regulations with switches and socket outlets and other equipment in habitable rooms to be located between 450 and 1200mm above FFL.

INTERNAL LIGHTING

Install low energy light fittings that only take lamps having a luminous efficiency greater than 45 Lumens per circuit watt and a total output greater than 400 lamp lumens. Not less than three energy efficient light fittings per four of all the light fittings in the main dwelling spaces to comply with Part L of the current Building Regulations and the Domestic Building Services Compliance Guide.

HEATING

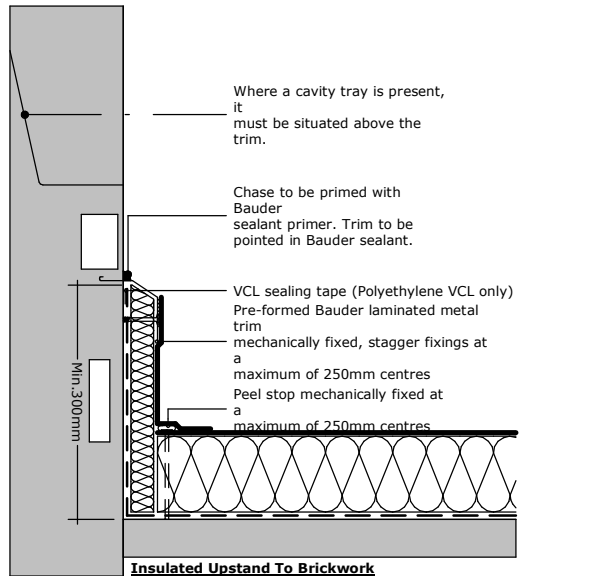
Heating system to be designed, installed, tested and fully certified by a GAS SAFE registered specialist. All Work to be in accordance with the local Water Authorities bye laws, the Gas Safety (installations and Use) Regulations 1992 and IEE Regulations.

STUD INSULATED WALL SPEC

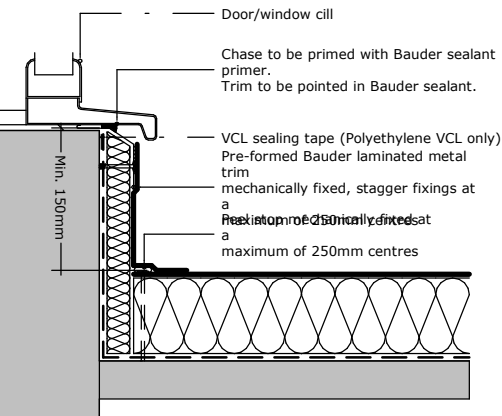
75x40 timber studs @ 600c/c with dpc strips to back of timber. 50mm kooltherm k12 kingspan board between studs. 52.5mm insulated platerboard fixed to outside of timbers.

ESCAPE WINDOWS

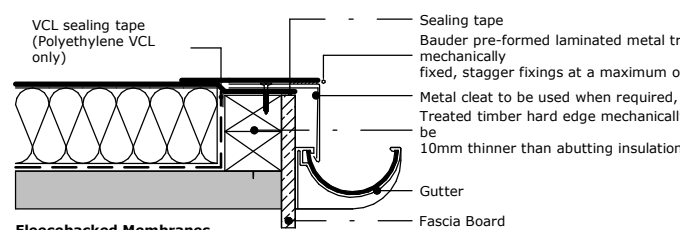
Provide emergency egress windows to any newly created first floor habitable rooms and ground floor inner rooms. Windows to have an unobstructed openable area of 450mm high x 450mm wide, minimum 0.33m sq. The bottom of the openable area should be not more than 1100mm above the floor. The window should enable the person to reach a place free from danger from Fire.Alternatively provide FD30 doors to all means of escape corridors and landings.



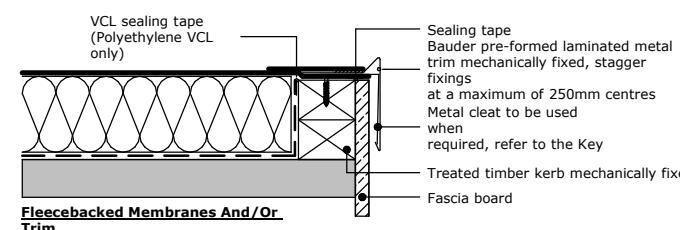
Insulated Upstand To Brickwork



Insulated Upstand To Door/Window Cill/Sky Larn



External Gutter - Less than 8m High



Perimeter Kerb

3 ROOF UPSTAND DETAILS

1 : 10

NEW WINDOWS

New windows to be double glazed with 16mm argon gap and soft coat low-E glass. Window Energy Rating to be Band C or better and to achieve U-value of 1.4 W/m²K. The door and window openings should be limited to 25% of the floor area.

NEW DOORS

Door Energy Rating to be Band B or better and to achieve U-value of 1.4 W/m²K.

GROUND AND PURGE VENTILATION

Ground ventilation - Controllable background ventilation via trickle vents to BS EN 13141-3 within the window frame to be provided to new habitable rooms at a rate of min 5000mm²; and to kitchens, bathrooms,WC's and utility rooms at a rate of 2500mm².

Purge ventilation - New Windows/rooflights to have openable area in excess of 1/20th of their floor area, if the window opens more than 30° or 1/10th of their floor area if the window opens less than 30° internal doors should be provided with a 10mm gap below the door to aid circulation.

Ventilation provision in accordance with the Domestic Ventilation Compliance Guide.

EXTRACT BATHROOM

Provide mechanical extract to kitchen ducted to external air capable of extracting at a rate of not less than 30 litres per second Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic Ventilation Compliance Guide. Intermittent extract fan to BS EN 13141-4. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning

RAIN WATER DRAINAGE

The discharge of the rain water and surface water is through connecting the new system to an existing sever system. The type of sever needs to be determined weather or not this is a surface water sewer or combined system.Dependant on the type of sewer, either being private, public or adopted, authorization is required from either the local authority or landlord for connections rights with the calculated discharges rates prior to any construction works. The water collected from the roof are connected in 115mm diameter 1/2 round pvc plastic gutters to 19mm primo pvc fascias discharging via 63mm diameter rain water pipes to trapped back inlet gully's (b.i.g.).Fire rating of roof to be 30mins.Underground drainage to consist UPVC proprietary pipe.Provide 600mm suitable cover (900mm under drives). Shallow pipes to be covered with 100mm reinforced concrete slab over compressible material.

UNDERGROUND FOUL DRAINAGE

Underground drainage to consist of 100mm diameter UPVC proprietary pipe work to give a 1:40 fall. Surround pipes in 100mm pea shingle.Provide 600mm suitable cover (900mm under drives). Shallow pipes to be covered with 100mm reinforced concrete slab over compressible material. Provide rodding access at all changes of direction and junctions, ventilation vents to end of runs. All below ground drainage to comply with BS7158 and BS801. Dependant on the type of sewer, either being private, public or adopted, authorization is required from either the local authority or landlord for connections rights with the calculated discharges rates prior to any construction works..

ABOVE GROUND DRAINAGE

All new above ground drainage and plumbing to comply with BS.5572.1978 for sanitary pipework. All drainage to be in accordance with Part H of the Building Regulations. Wastes to have 75mm deep anti vac bottle traps and rodding eyes to be provided at changes of direction. Size of wastes pipes and max length of branch connections (if max length is exceeded then anti vacuum traps to be used)

Wash basin - 1.7m for 32mm pipe 4m for 40mm pipe

Bath/shower - 3m for 40mm pipe 4m for 50mm pipe

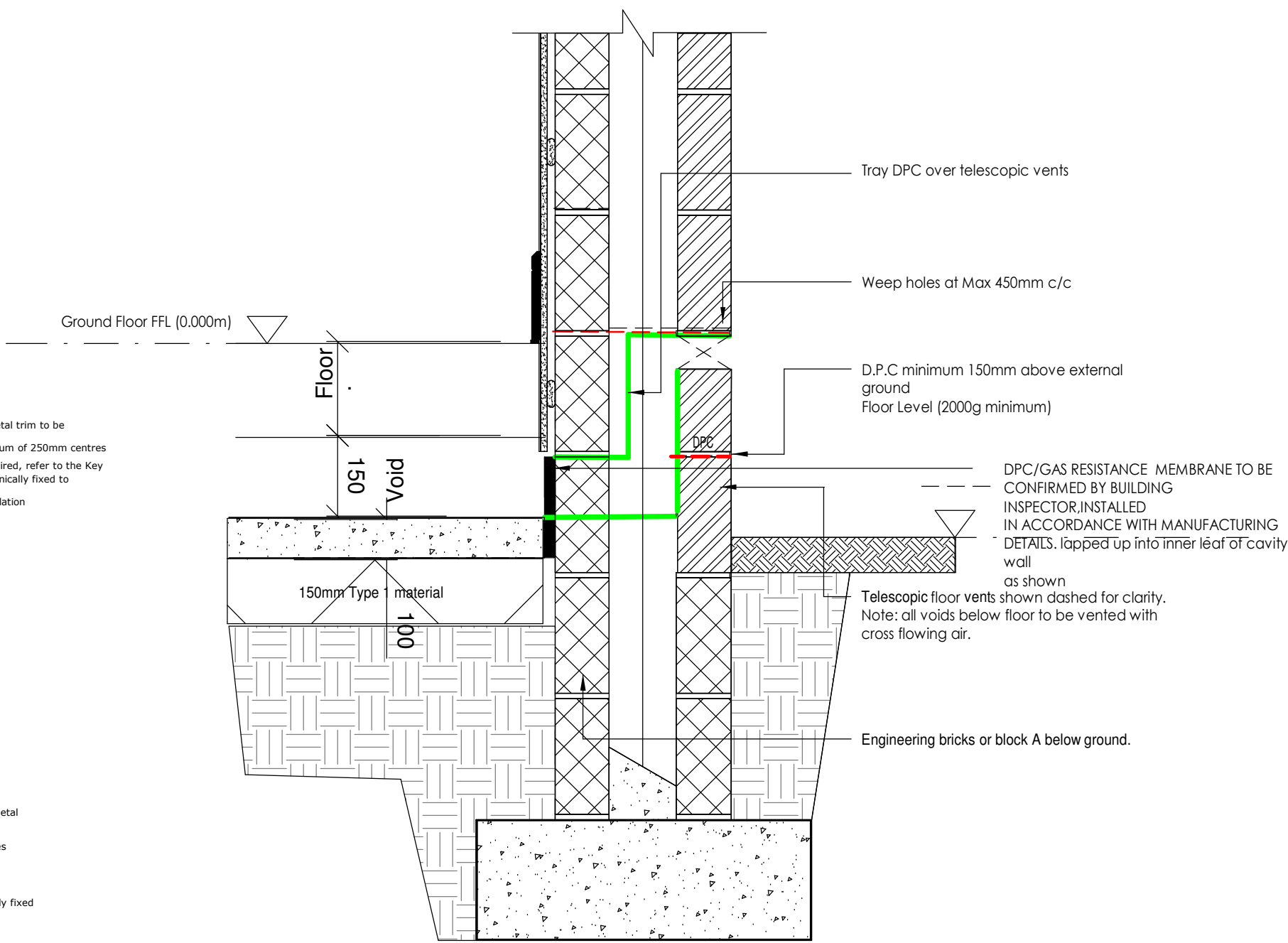
W/c - 6m for 100mm pipe for single WC

All branch pipes to connect to 110mm soil and vent pipe terminating min 900mm above any openings within 3m.

Or to 110mm upvc soil pipe with accessible internal air admittance valve complying with BS EN 12380, placed at a height so that the outlet is above the trap of the highest fitting.Waste pipes not to connect on to SVP within 200mm of the WC connection. Supply hot and cold to all fittings as appropriate.

AUTOMATIC AIR VALVE

Ground floor fittings from WC to be connected to new 110mm UPVC soil pipe with accessible internal air admittance valve complying with BS EN 12380, placed at a height so that the outlet is above the trap of the highest fitting and connected to underground quality drainage encased with pea gravel to a depth of 150mm.



TIMBER FLOOR

2 GROUND FLOOR CONSTRUCTION

1 : 10

Construction build-up includes:

3mm skim 52.5mm Kingspan Kooltherm K118 Insulated Plasterboard fixed to 100mm timber studs at 400mm centres

75mm Kingspan Kooltherm K12 Framing Board

25mm timber stop batten

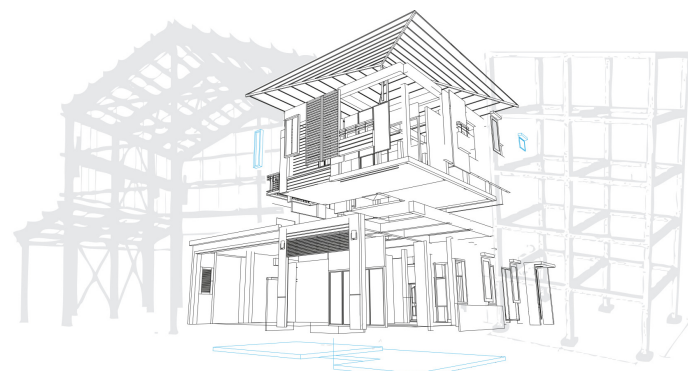
DPC strip on studs

215mm brickwork.

See website for more details



STUD WALL DETAIL TO INSULATE GARAGE



vision | DESIGN | group
ENGINEERING CONSULTANCY

Rev	Description	Date
1	FIRST ISSUE	22/09/22
CODE I	SUITABILITY DESCRIPTION INITIAL ISSUE	
STATUS S2	PURPOSE OF ISSUE INITIAL ISSUE	
PROJECT 4 ELLESMERE ROAD SOUTH		
TITLE BUILDING REGULATION DETAILS		
CLIENT K.TIDMAN		
DRAWN BY MW	CHECKED BY MW	DATE 20/09/22
SCALE (@ A1) As indicated		PROJECT NUMBER MCS2185
DRAWING NUMBER A106		REV 1