

Construction Notes.

Demolition Pine end wall of garage to be demolished to existing wall plate level. Bed of coursework to be cleaned ready to receive new brickwork

Drainage Insert PCC lintels over drain runs passing through external walls sized to Total Building Control Officer approval and with minimum end bearings of 150mm. Drains passing under buildings to be encased in minimum 150mm concrete.

Storm Water Drainage Downpipes to discharge into PVCu back inlet gulleys and ACO drainage connected into existing drainage. Underground pipework to be 110mm PVCu bedded on (min 100mm) and encased in granular material to Total Building Control Officers approval. Pipework to be laid to minimum 1:40 fall

Foul Water Drainage Underground pipework to be 110mm PVCu bedded on (min 100mm) and encased in granular material to Approved Building Control Officers approval. Pipework to be laid to minimum 1:40 fall. Inspection Chambers (generally minimum 450 x 450mm minimum internal size) to be preformed Universal Inspection Chambers or constructed with 225mm thick engineering brickwork with 150mm concrete slab base fitted with standard air tight medium duty frame and cover. Half round channels should be used in chambers with branches discharging into channel at or above the level of the horizontal diameter. Channels and branches should be benched up at least to the top of the outgoing pipe and at a slope of 1 in 12. The benching should be rounded at the channel with a radius of at least 25mm.

Foundations Existing foundations have been inspected by Cameron Jones on the 4th September 2020 and were agreed to be acceptable to construct an additional storey thereon.

Ground Bearing Concrete Floor Slab Minimum of 50mm sand/cement screed on polythene vapour control layer on 100mm. Celotex FF4000 insulation board (25mm. upstand to perimeter to prevent cold bridging)on 1200 gauge DPM over-lapped and taped with DPC and dressed up the inner face of the existing external skin laid on the existing concrete garage floor slab. Floor to achieve a U value of better than 0.25 W/m2K

Cavity Wall Construction. Facing brickwork to match existing, 50mm clear cavity, 100mm insulation block, insulated plasterboard and plaster skim OR Facing brickwork to match existing, 50mm clear cavity,140mm timber framed construction with13mm render and skim finish. 25mm check rebates to wall reveals. Cavity wall to achieve 'U' value of 0.21W/m2k. Stainless steel wall ties bedded minimum 50mm into bed joint of each leaf with retaining clips to hold insulation boards fixed @ maximum 750mm c/c horizontally and 450mm c/c vertically and additional ties within 225mm of reveals to unbonded openings. Furfix or similar approved stainless steel wall connectors fixed to manufacturers recommendations. Break through into existing cavity where applicable to maintain continious cavity and install vertical DPC. Lay horizontal DPC in continuous lengths with minimum 100mm laps and full laps at angles. DPC width at least full width of masonry leaf. DPC level to be minimum 150mm above GL. Vertical insulated DPC's installed to jambs of openings. Standard horizontal DPC's to lintels over window and door openings.

Lintels External cavity wall openings to be spanned with insulated prefabricated stainless steel lintels to BS EN 845-2, sized to Local Authority Building Control Officer approval with minimum end bearings of 150mm and tray DPC to overlap openings 225mm minimum either side, complete with stop ends and proprietary PVC weepholes over heads of openings @ 450mm c/c. Internal wall openings to be spanned with 100 x 140mm prestressed concrete lintels with minimum 150mm end bearings. Lintels to approval of the Local Authority Building Control Officer.

Radon Barriers at DPC level (where required by BCO) Incorporate Polyethylene radon prevention barriers in accordance with manufacturers instructions. Observe good building practice and wet bed all barriers in accordance with codes of practice regarding installation of damp proof courses. Ensure all junctions between barrier lengths and mouldings are well lapped and sealed using radon barrier sealing tape.

Pitched Roof Construction Composite slates or concrete interlocking roof tiles with plain hip/ridge tiles to match existing on 50 x 25mm treated battens on breathable felt on treated softwood rafters or prefabricated trussed rafters by specialist. Trusses to be doubled up either side of the rooflights with 50mm thick timmer joists above and below. Rafters to be supported on 100 x 75mm treated softwood wall plate bedded in mortar and strapped down @ maximum 2000mm c/c. Tiles/slates fixed strictly in accordance with the manufacturers recommendations. 100mm. Either 100mm rigid insulation or similar laid between trussed roof rafters with 25mm air gap and boarded. OR Rockwool insulation laid between ceiling joists with 200mm. Rockwool insulation laid over ceiling joists to acheive 'U' Value of 0.15W/m2k. Form opening for access into roof space and provide insulated ceiling access panel. Install PVCu fascia boards & PVCu ventilated soffits equal to 25mm continuous air gap or over-fascia ventilation to comply with the latest edition of the Building Regulations Approved Document Part F. Mono-pitch roofs to have abutment ventilation pack with minimum 5mm continuous ventilation. Rainwater gutters to be 100mm PVCu to match existing with 68mm dia downpipes all clipped and bracketed in accordance with the manufacturers recommendations. **Timber sizes to approval of the Local Authority Building Control Officer.**

Cavity Tray to Abutments Supply and fix code 4 lead flashing & Cavity Trays Type X Remedial cavity tray or similar approved with adjustable cavity upstand (min 150mm) installed in accordance with the manufacturers recommendations.

External Door Supply and fix new PVCu. door and frame , internally sealed and double glazed with low E glass. Max.'U' Value 1.6W/m2k. with multi lock system. Include for all furniture fixings,Stormguard AM3 or similar approved low level threshold low level threshold where required, mastic seal and making good to reveals and existing finishes where applicable.

Windows Supply and fix new internally sealed double glazed PVCu. window with low E glass. Max. 'U' Value 1.6W/m2k. Windows to provide $\frac{1}{10}$ th. daylight and $\frac{1}{10}$ th. ventilated opening area of the floor area or the room served with 4000mm2 background ventilation to shower room and kitchens and 8000mm2 to habitable rooms. Include all furniture, fittings, plastic window boards and mastic seal and make good to reveals and existing finishes.

Internal Doorset Internal 838mm wide flush door with internal skeleton or cellular core, hardboard faced both sides, lipped on two long edges including all door furniture and hinges with 100 x 32mm lining and 35 x 12mm doorstops.

Timber Stud Internal Partition Wall 47 x 75mm treated sawn softwood sole plates, heads and studs @ max 450mm centres. Horizontal noggins @ max 600mm centres staggered vertically. Additional studs at plasterboard joints and fixing points etc. 12.5mm plasterboard and skim both sides with 75mm Rockwool insulation between studs.

Electrical Installation All works to be in accordance with BS 7671 (the IEE Wiring Regulations). Installation to be carried out by Competent Persons as defined in the Building Regulations Approved Document P. Power points & light switches to be positioned 1000mm above FFL.

Lighting Low energy sealed bulkhead light fitting and pull switch in shower room. Low energy pendant light and switch in bedroom / lobby.

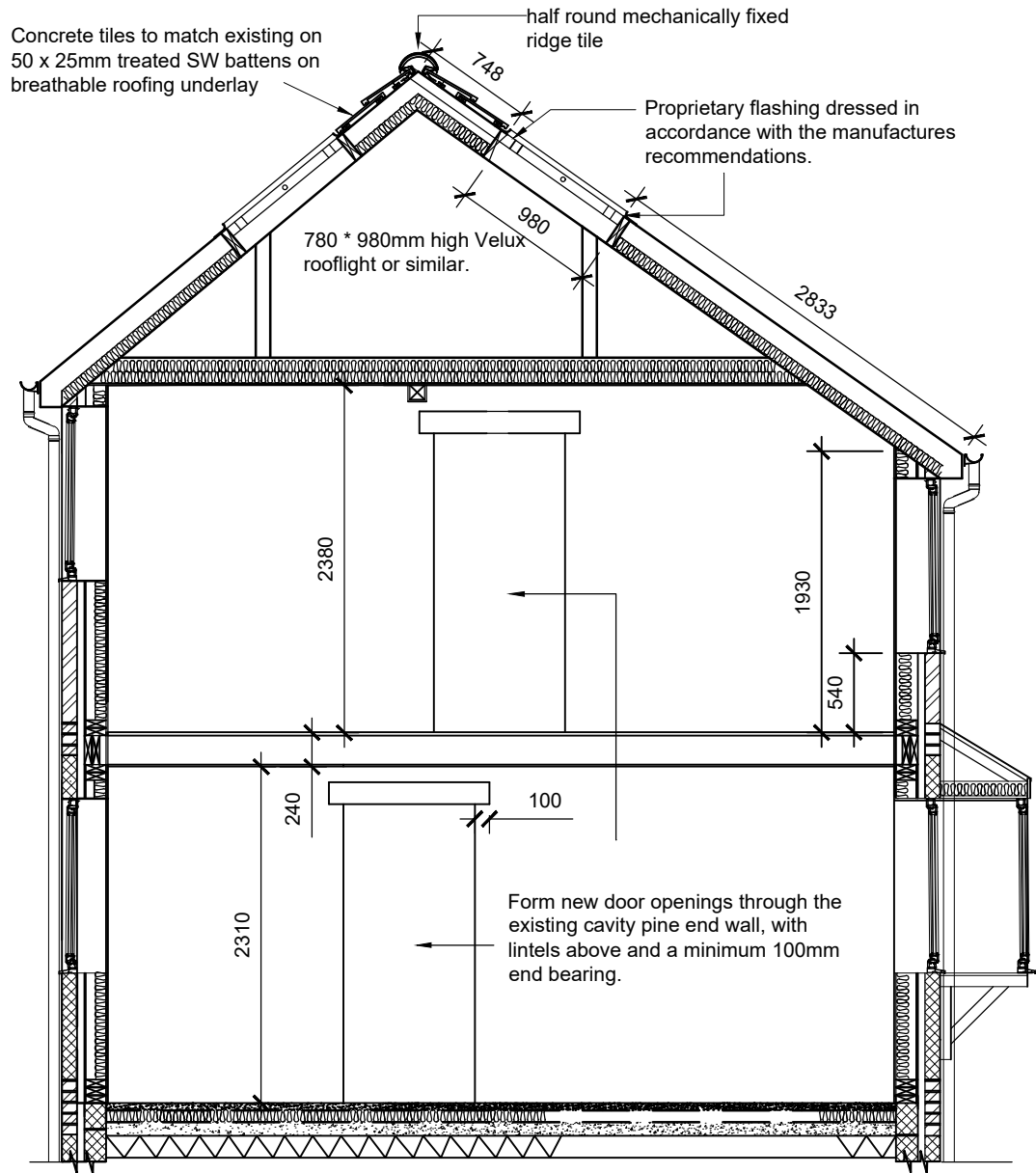
Smoke Detectors (for Bedroom Extensions only) Supply and fix electronically operated interlinked smoke detectors with battery back up to first floor & ground floor circulation areas.

Heating Extend existing C.H. pipework to new radiators capable of maintaining temp. of 18 deg. C. when external temp. is -1 deg. 'C'.

Hot and Cold Water Hot and cold distribution pipework to be 15mm dia. and 22mm dia. copper pipes fixed back to solid backgrounds with clips. The hot and cold installation is to be extended from the existing system and must allow tolerance for expansion and methods of jointing, frequency and type of fixing to comply with the manufacturers recommendations. All copper pipework methods of jointing shall guard against the possibility of contamination, and lead free solders must be used in capillary joints fittings. Pipework shall be lagged where there is a risk of frost damage

Mechanical Ventilation Supply and fix extractor fan, double insulated to meet Building Regulations (Document F) requirements of 15 litres/second to shower room (and 60 litres/second to kitchen and 6 litres/ second to W.C.)

Painting & Decorating Internally apply, 1 mist and 2 full coats emulsion to walls and ceilings. Knot, prime and stop and apply 2 coats undercoat and 1 coat gloss to wood surfaces.



Typical Timber Frame Section constructed off the existing garage floor

34 Parc Gilbertson, Pontardawe, Swansea. SA8 4PU

Scale Not To Scale

NOTES

Do not scale off drawing. All dimensions to be checked on site.