

BUILDING REGULATION NOTES (to read in conjunction with the contract specification)

FOUNDATIONS
To be a Strip foundation. Generally to comply with CP2004 and to the Building Inspectors approval.

GROUND FLOOR TO REAR UNIT
To comprise:-
- 75 mm min reinforced screed
- Underfloor heating
- 125mm Celotex FF4000 floor insulation - tape joints with insulating tape
- 1200 guage polythene damp proof membrane
- Mass concrete floor slab Mix GEN 1.
- 150mm sand blinded hardcore base.
Damp Proof Membrane taken up walls and lapped with wall DPC to form continuous waterproof barrier.
Include 12mm Celotex RR insulation vertically to the perimeter of the external walls to prevent cold bridging.

To have a 'U' value of 0.11w/K or better, to comply with the Approved document L1A

EXTERNAL WALLS TO REAR UNIT
cavity wall comprising:-

- existing stone structure
- 50mm cavity.
- 9mm plywood sheathing bonded to timber studs.
- 140 x 38mm timber frame stud inner leaf to timber frame manufacturer's design and spec.
- 25mm service zone
- plasterboard and 3mm skim

- **NOTE:** Timber frame manufacturers structural details to be submitted to the Building Control department before erection.

CAVITIES
Stainless steel cavity wall ties to BS1243 at 600mm horizontal and 450mm vertical staggered centres generally and 225mm vertically at openings and corners, to timber frame manufacturer's design and spec. Wall ties should be capalbe of accommodating any anticipted diffential movement, fixed to stud not sheathing.
Cavity below ground level filled with lean mix concrete to within 225mm of finished floor level.
Form weep holes at 900mm centres to perpendicular joints at ground level. Incorporate DPC horizontally to each leaf at floor level and vertically at openings.
Lap 1200 gauge polythene DPM with wall DPC's to form a continuous moisture barrier.
Straight runs of block work in excess of 6m to have movement joints in accordance with BS 6093.
Form thresholds to external door openings using bricks as detailed on drawings.

All to have a 'U' value of 0.13Wm2K or better, to comply with the Building Regs 2010,

EXISTING EXTERNAL WALLS
- scratch coat
- 50mm cavity
- 75mm Celotex GA4000 insulation set inbetween a stud system metal or timber
- 25mm service zone
- plasterboard and 3mm skim

All to have a 'U' value of 0.13Wm2K or better, to comply with the Building Regs 2010,

WINDOW CILLS
cills to be pressed aluminum cills to match windows with DPC under cill (as detailed on drawings).

FIRST FLOOR
As SE design and spec .

SOUND
All internal walls and internal first floors to be fully insulated with 100mm ROCKWOOL RW2 insulation inbetween joists and studs.

All timber floors:

- ScreedBoard 28 High Acoustic performace: Airborne 48dB(1) and Imapct 59dB
- new T&G 22mm floor joists
- existing timber joists (or new depending on location)
- 100mm rockwool sound slab
- approx 40mm lath and plaster
- 25 x 50 timber batten
- 15mm Gypsum sound board platerboard and taped finish

FIRE PROTECTION AND ESCAPE

Steel beams supporting first floor and external wall to be encased in 15mm Gyproc fireline board to give half hour fire protection.

Windows to new bedroom to have an obstructed openable area that is at least 0.33SqM, be a minimum of 450mm high and 450mm wide. The bottom of the openable area should not be more than 1100mm above the floor.

CEILINGS AND INTERNAL WALLS
2 layer of 12.5mm plasterboard with 3mm skim smooth finish.

WINDOWS AND DOORS
Windows to be double glazed sealed units, with opening lights as indicated on elevation drawings. Windows frames to be SET AS DETAILED.
Glass to all windows to be low emission 'K' glass or similar approved and to have a whole unit 'U' value of 1.4Wm2K or better and to have a low g factor 0.5 to comply with the Approved document L1A.
All windows to have trickle ventilators in window frame head.
Toughened glass to be fixed to all external doors AND WINDOWS.
Installation to be in strict accordance with manufacturers specification.
Weatherseal window head, jambs and cill to be Compriband 600.

Doors and windows, to meet the security requirements of British Standards publication PAS 24:2012

FRONT DOOR TO BE A MINIMUM 775mm WIDE

EXTERNAL SLIDING DOORS
Sliding Doors to be as clients requirements, Smart Systems Visoglide Plus profile, with double glazed sealed units, to have a whole unit 'U' value of 1.5Wm2K or better and to have a low g factor 0.5, toughened double glazed units as indicated. All accessories for the correct installation in accordance with the manufacturers specification. <http://www.smartsystems.co.uk>

Front door to be softwood timber as elevations, set in hardwood frame. To include Exitex MDS/140 Mobility Inward Door Sill 1m - Aluminium - 19121 low level threshold on DPC.

RAMP TO FRONT ENTRANCE
1 in 12 ramp up to a 900 x 900mm landing. 150mm Concrete Brushed finished, on 100mm compacted Hardcore. Front door to have brick laid as soldier course with low rise 'bump over' threshold by door manufacturer . With a vertical DPC at wall/ramp junction, see detail showing upvc gutter set within concrete ramp.

STAIRCASE
Timber from ground to first floor, to have maximum rise 170mm, maximum going 240mm, clear headroom 2000mm vertically, 900mm wide overall strings set into depth of stud walls, handrail minimum 900mm above flight and a minimum 900mm to landing. Balusters to be formed using solid studwork and skim plaster finish with ss stopbeads at all edges.

ROOF STRUCTURE
Trussed rafters at 600mm maximum centres to BS. 5268 part 3 1985, with the bottom cord capable of taking a uniformly distributed imposed load of 1.5Kn/Msq with galvanised ms plate connectors and 100 x 25mm diagonal and lateral bracing to BS 5268.
All to specialist manufacturer's design.
100 x 50mm wall plate strap fixed to walls using 30 x 5 x 900mm galvanised ms straps at 2000mm centres
End 3 trusses rafters and ceiling ties abutting gable walls stap fixed to masonry using 30 x 5 x 1500mm galvanised ms straps at 2000mm centres. Provide noggins between trusses at strap positions to support straps.
Form storage platform over bottom chord of trusses using 22mm chipboard base on 100 x 50 sw bearers at 400mm centres.

ROOF FINISH
Artificial Slate **Marley 600mm x 300mm Thrutone Man-Made Fibre Cement Slate - Graphite**, all to be laid in accordance with the manufacturers recommendations on 50 x 25mm treated sw battens on sarking felt to BS 747 type F.
Roofing felt to be continuous over ridge, hips and valleys, dressed down into gutter and fixed to top side of softwood roof trusses.
Incorporate 'Cavity tray' over fascia ventilator - OFV25 to give 25mm continuous slot ventilation.

VENTILATION
Natural ventilation opening lights to Habitable rooms, kitchens and toilets to be provided of at least 1/20th of the floor area of the room.
Mechanical ventilation equivalent to 68 litres per second is to be provided to bathroom, 15l/s to WC and 60 litres per second to kitchens,.
Vent ducts to incorporate condensation traps and outfall pipework.
To avoid the build up of condensation in the warm roof structure breathable Intello Plus VCL allows venting to inside when conditions require. Trickle vents to be provided to all windows to achieve 8000mmSq background ventilation in habitable rooms.

SPRINKLER SYSTEM
Sprinkler system to be designed and installed by a competent person to comply with Approved Document B in Wales

CONSERVATION OF FUEL AND POWER.
U values as listed above comply with Approved Document L1A in Wales

CONSERVATION OF FUEL AND POWER.
Roof Insulation
Cold roof construction, Horizontal roof voids to be insulated with 350mm Rockwool insulation quilt laid in 2 layers, 150mm thick between rafters and 200mm over rafters. 12.5mm plasterboard and 3mm skim nailed into rafters. All to give minimum U value of 0.16 W/sq.mK
Internal sloping soffit roof to be insulated 2No. 75mm Celotex tuff-R insulation boards set between rafters and 12.5mm plasterboard with 3mm skim finish as detailed. All to give a 'U'-value of 0.20w/m2/degC or better.
50mm minimum air space to be maintained above insulation.
50mm minimum air space to be maintained above insulation using treated sw spacer battens fixed to sides of rafters.

AIR PRESSURE TESTING.
Air Pressure tightness of 5 and is to be carried out in accordance with The Building Regualtions 2013, Approved Document L1a, Section 2 : Quality of construction and commissioning.

ABOVE GROUND PLUMBING AND DRAINAGE - Employers requirements:
Single stack AAV system to be provided and fitted in accordance with the manufacturers recommendations comprising 100mm upvc pipe vented in accordance with part H1 of the Building Regulations, 32mm wastes to basins, 40mm wastes to sinks and 100mm outlets to wc pans. 50mm traps to wc pans, 75mm deep seal traps to all other fittings.
Resealing traps to be provided to 32mm wastes exceeding 1500mm in length and 40mm wastes exceeding 3000mm in length. Where visible, white internally, black externally

RAINWATER DISPOSAL- Employers requirements:
Rainwater system and gutters to be min 115mm half round dia as detailed, installed in accordance with the manufacturers recommendations.

BELOW GROUND DRAINAGE - Employers requirements:
Underground drainage to to be OSMA (or similar approved) Upvc drainage system and fittings laid in accordance with the manufacturers recommendations, to BS 4660:1973.

Foul Drains laid to 1 in 40 max falls. Surface water drains laid to 1 in 80 minimum falls.

Inspection chambers and covers to be Osma 450mm dia. universal inspection chambers including base, shaft and 4D.491 cover and frame or similar approved. All bedded and backfilled to Osma's recommendations.

Manhole with dropshaft to accomodate change in level from site to mains sewer to be provided

Rodding Eyes to be Osma sealed rodding eye and cover ref: 4D 356 or similar approved.

PIPEWORK UNDER THE BUILDING
All pipework under the building to be encased with a minimum of 150mm thick concrete of ST4 strength placed in one operation, to incorporate 18mm thick compressible expansion board at regular intervals as dictated by pipe joints.

WALL PENETRATIONS- Employers requirements:
All drains which pass through walls to have a 600mm long rocker pipe and RC lintols over.
Fill gap between around wall penetrations with expanding form.

EXTERNAL GULLIES- Employers requirements:
Provide and lay PVC-U Osma (or similar approved) plain hopper gully (4D.700) connected to universal pipework, laid on a 75mm thick 1:2:4 square concrete bed. Black

Backfill around gully with selected material, grating to be set in path 10mm below finished level to aid surface water discharge into prescribed underground drainage. To include trap insert.

SOIL & VENT- Employers requirements:
Stub stacks are to terminate above flood level of cisterns via 4S.304 air admittance valve.

HEAT PRODUCING APPLIANCES - Employers requirements:
Space and Hot Water Heating :
As M&E design and spec .

The whole of the installation to meet the requirements of the current British Standard Code of Practice.

ELECTRICAL INSTALLATIONS- Employers requirements:

Power and Lighting
All light & power fittings to be supplied by MK or similar approved.
All power points to be double switch socket outlets.
All power outlets to be double pole.
The responsibility of design, adequacy and suitability of each system shall be the contractors. All to meet the requirements of Part P, to design, install, inspect and test all electrical work in accordance with BS 7671.

As M&E design and spec .

Internet
The unit will have an access point linked by ducting to a network termination point. As Diagrams 1(a) The access point is on an outside wall and connected by a through-wall duct to the network termination point

Extract Fans.
Extract fans to be fitted as indicated on M&E plan.

HYGIENE - Employers requirements:
The hot water system is to be vented.

HOT WATER LIMITED TO 48 DEGREES

MATERIALS AND WORKMANSHIP

All materials and workmanship are to comply with the relevant and current British Standards, Codes of Practice, current edition of the Building Regulations, and shall be to the approval of the Building Inspector.
Plumbing to comply with BS 5572.
Electrical work to comply with the current edition of the IEE Regulations. Generally structural timbers to be SW or whitewood C24 grade to BS 4978. To be C16 where specified by the Engineer.

All softwood to be vacuum pressure impregnated.
Softwood for joinery to BS 1186 part 1, screws to BS 1210, nails to BS 1202.
Carpentry to comply to CP 112.
All brickwork below DPC level to be Class B engineering bricks.

GENERAL.
Do not scale off the drawings.
All heights, levels, sizes and dimensions to be checked on site before any work is put in hand.

Locate existing services/drainage runs prior to construction. Existing services through site to be protected during construction. There is an OH power line on site near entrance follow HSE guidelines for electrical safety at work.

The manufacturers recommendations are to be followed in respect of the installation and fixing of all products and any discrepancies between those recommendations and any other requirements of the specification and/or drawings are to be notified to the architects.

 George and Co.

Proposed refurbishment of
Howfield Bakery, High Street, Merthyr Tydfil

625.100	Specification		
sketch	1:50@A1	July '19	SG
1st Floor Woodfred Studios 62 High St Merthyr Tydfil CF37 8DE 017815126657 hello@georgeandco.studio www.georgeandco.studio			
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