

SPECIFICATION

GENERAL:- **Single Storey Extension to Rear**

Where building to boundaries the adjacent owner is to be informed under the terms of the Party Wall Act 1996 and its provisions followed. All dimensions must be checked on-site and not scaled from this drawing. Any dimensions given are in millimetres.

PART P BUILDING REGULATIONS ELECTRICAL SAFETY:-

- Where electrical work is required to comply with Schedule I of the Building regulations it will either:
- Be carried out by an individual or company registered under the competent persons scheme.
 - Be carried out by an individual or company who will provide a certificate in accord with BS 7671 upon completion.
 - Where work is carried out by an individual or company not described above the installation will be tested by a person competent to do so under the provisions of BS 7671 and a certificate issued to the applicant in accordance with the testing requirements of the British Standard.

1. NEW ROOF CONSTRUCTION:- Flat Roof

As per detail below. To provide 'U' value of 0.13 or better.

2. NEW EXTERNAL WALLS AND FOUNDATIONS:-

Extension Build: 100mm Face Brick to the external leaf. 150mm Cavity with min. 100mm Insulation Board. 100mm thermal block inner leaf. 13mm thickness British Gypsum plasterboard all to achieve a 'U' value of at least 0.18 W/m²K or better.

Cavity must not be closed at eaves with brick/blockwork. Insulation to be in accordance with 'robust construction details'. All external and internal leaves are to be securely retained by approved stainless steel wall ties to BS 1243, positioned 450mm apart vertically and 750mm horizontally. Wall ties at openings spaced not more than 300mm vertically provided within 225mm from sides of openings at unbonded jambs. Lean mix cavity fill to all cavity walling terminating min. 225mm below lowest DPC level. Cavity insulation to finish at same level as floor slab insulation. Below ground level both leaves shall be built in Trench-blocks or class 'b' engineering brickwork. Foundations in accordance with BS8004. All foundations, subject to ground conditions, to have at least 250mm cover below ground level. Minimum foundation depth in clay soil to be 900mm. Foundations shall be extended below pipe or ductwork penetrating walling. Oversite concrete will be level with or above the finished ground level. Foundation design must be approved by the BC officer subject to site investigation. Unsuitable load bearing strata will necessitate separate structural design.

- (a) Concrete trench fill foundations to all load bearing cavity walls to be min. 600 x 400mm deep, depending on exposed ground condition.
(b) Concrete strip foundations to all single skin load-bearing walls to be min. 300 x 300mm deep, depending on exposed ground condition.

3. LATERAL RESTRAINT TO FLOOR AND ROOF:-

Where applicable, all floors and roofs to be anchored by Bat or Catnic metal anchors (30 x 5 mild steel). Straps to be secured to timber and walls min. 1000mm long at max. 1.2mm c/c (1.8m c/c in single storey construction.)

4. SOLID FLOOR SLAB:-

75mm concrete screed, on 100mm Concrete Slab, on 165mm insulation board with a 25mm upstand of insulation provided to perimeter edges of floors, on 1200mm gauge DPM lapped to wall DPC. Sand blinding and minimum 150mm clean compacted hardcore. To provide 'U' value of 0.15 or better.

5. LINTELS & STEELWORK:-

Unless otherwise stated, lintels to be Catnic combined steel to BSS977 (sizes as recommended by manufacturer) or Universal Beams, providing a min. 150mm end bearing, typically on padstones. All lintel backs and soffits to have min. half hour fire resistance and be insulated to prevent cold bridging where necessary. Where steel U.B's are used they have to be seated to concrete pad-stones or steel bearer plates each end. Half hour fire protection to steelwork. Ground condition under Steel end nibs to be checked fro adequacy.

6. DAMP PROOF COURSES:-

- Horizontal and vertical DPC's will comply with BS743 (pitch polymer) and incorporate:-
- Min. 150mm above ground to all load bearing walls, lapped with floor damp proof membrane.
 - Vertically built into jambs of all external openings.
 - Horizontally stepped to all external openings.

7. DRAINAGE:-

The existing drainage system is a single line combi system. UPVC fittings to BS 4514, BS 5255. Baths, sink units, showers - 42mm dia. wastes via 75mm traps. WC pans - 100mm dia. with 100mm traps. Where WHB waste exceeds 1.75m length or Bath/Shower exceeds 2.3m, anti-syphon traps to be fitted. Below ground drainage to comprise Marley UPVC pipes to BS 4660 & BS5481 or similar, laid on granular bed material to BS 882 table 4. The selected fill should be free from stones larger than 40mm clay exceeding 100mm, timber, vegetable matter or frozen material. Where rigid pipes of less than 150mm dia. have less than 300mm cover, or rigid pipes of 150mm or more have less than 600mm of cover the pipes should be encased in 150mm concrete. Where flexible pipes are not under a road or have less than 600mm cover they should be encased in 150mm concrete. Where drainage runs within 1 metre of any foundation and the level of the drain is below the level of the foundation, then the drain trench should be backfilled to the ground level with concrete. Any pipe penetrating through a structure below ground level should have a lintel above opening (or use of rockerpipes) and a settlement gap of 50mm corkpack or similar flexible material should be inserted to provide protection to the drain. Pipe to be either rocker type or hole around fitted with compressible material. All gravity drainage should have a min. fall requirement of 1:40 to provide self-cleansing velocities. All gullies will be back inlet trapped gullies with rodding facility unless otherwise stated. Inspection chambers of up to 900mm depth may be of a UPVC or GRP material or constructed of 150mm concrete base slab with benching formed in 1.2 cement mortar to 1:12 gradient trowelled smooth with all channels, branches and connecting bends. The walls are to be 225mm, class 'B' engineering brick to BS 3921 to the required invert depth. 150mm concrete cover slab with haunching forming the cover level complete with frame and lid. Where foul and surface water are available on site connections must be proved. Priority order for surface water is:

- Soak-away which must be designed to comply with BRE 365.
 - A watercourse
 - A sewer.
- Rainwater connections to foul sewers may only be made where soak-away and watercourse cannot be used. On completion the system is to be water pressure tested and cleansed.

It is the responsibility of the building contractor to ensure provision is made for rainwater and foul waste egress.

8. TIMBER PARTITIONS

100x50mm vertical softwood studs at 600c/c secured to 100x50mm head and sole plates. Noggins at 600mm intervals. 12.7mm Gyproc plasterboard and skim finish to both sides. Provide 25mm Isowool APR 1200 sound insulation to partition voids at bathrooms & around bedrooms to comply with E2 requirements for sound deadening. Floor joists to be doubled up when running parallel with and under timber partitions. Stud to eaves to be 100x50mm at 400c/c to provide support to re-inforced rafters and set on new main edge bearer beams. Provide 50mm Kingspan Kooltherm KI2 insulation set between at 400c/c and internally finished with 12.5mm PIB - vapour check type and skim finished, to give a V-value of 0.30mm.

9. FRAMES, CASINGS, SKIRTINGS, ARCHITRAVES:-

New external windows to be UPVC and double-glazed. Internal door linings shall be 100x35 with planted stops. Skirting boards shall be 100x19mm chamfered. Architraves shall be 75x19 chamfered. Window frames to be double glazed with safety glazing to all doors, side panels, and all areas extending below 500mm from floor level. New or replacement windows, double glazed with 16mm air gap or 12mm argon filled gap and finished with soft, low 'E' coating to achieve U-value of 1.8. New doors with more than 50% internal glazed area to have a U-value of 2.2 or 3.0 if less than 50% internal glazed area. Installed either by Fensa registered installer or compliance via certificate from 'Building Control'. Max. area of windows, doors and roof-lights should not exceed 25% of floor area of the extension.

10. ELECTRICAL INSTALLATION:-

The proposed electrical installation, earthing and bonding to be installed to current IEE regulations & to comply with Part P requirements of the Building regulations. All work that involves a new circuit to a dwelling will either need to be notified to Building Control, who will then inspect the work, or be carried out by a competent person who is registered under a Part P Self-Certification scheme. Provide mains wired smoke/heat detection system to all new habitable rooms to clients consent. All units to have rechargeable battery backup in the case of mains power loss. Extend existing for power and lighting to client's instructions. Fixed fittings taking only lamps having a luminous efficiency of 40 lumens per circuit watt shall be used at one per 25m2 of floor area or one per four fittings which ever is the greater.

11. GAS INSTALLATION & HEATING:-

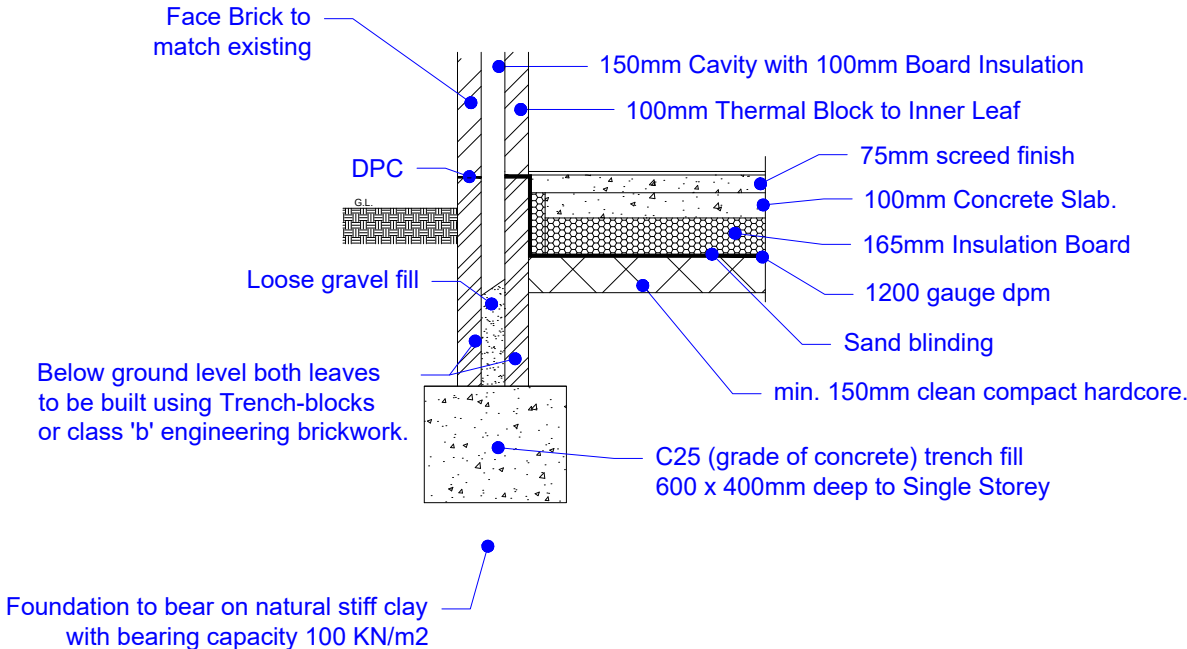
The proposed gas installation shall be designed and installed by CORGI company. Extend existing central heating to new areas to client's instructions. Where new or replacement boilers are installed, they must have a SEDBUK rating of Class A or B, or a CBIAP exemption procedure certificate must be issued by the heating engineer. New radiators fitted with thermostatic type valves with pipework insulated to non-heated locations.

12. NATURAL AND MECHANICAL VENTILATION:-

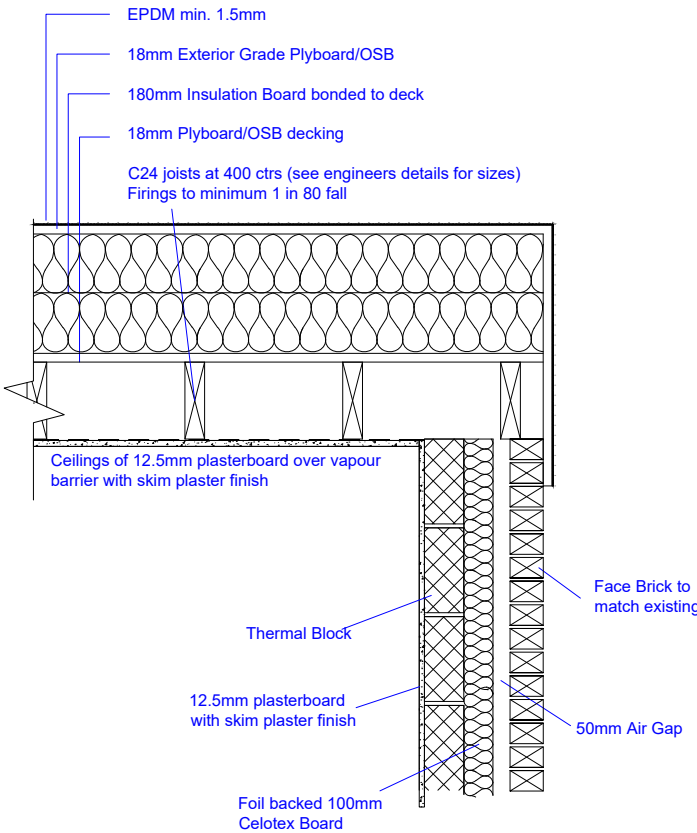
- Habitable room:
 - Rapid ventilation – 1/20th of floor area - for a hinged or pivot window that opens 30% or more, or for sliding sash windows. 1/10th of floor area - for a hinged or pivot window that opens less than 30%.
 - Background ventilation - 5000mm2
- Kitchen:
 - Rapid ventilation - opening window
 - Background ventilation - 2500 mm2
 - Extract ventilation fan rates – 30 l/s adjacent to a hob or 60 l/s elsewhere
- Utility:
 - Rapid ventilation - opening window
 - Background ventilation - 2500 mm2
 - Extract ventilation fan rates - 30 l/s
- Bathroom (with or without WC):
 - Rapid ventilation - opening window
 - Background ventilation - 2500 mm2
 - Extract ventilation fan rates - 15 l/s
- Sanitary accommodation (separate from bathroom):
 - Rapid ventilation - 1/20th of floor area or mechanical extract at 6 l/s
 - Background ventilation - 2500 mm2

- Additional Notes
- All existing foundations, beams and/or lintels accepting additional load, are to be exposed, if necessary, for consideration by the Building Control Surveyor and upgraded if found necessary.
 - Tray DPCs to be fitted over any newly located services boxes.
 - High level ventilation is provided using in-tile ventilation units.
 - All above ground drainage to be design and installed to comply with BS EN 12056-2:2000
 - All below ground drainage to be design and installed to comply with BS EN 752 - 1,2,3,4,5,6,7

Footings & Walls



Warm Flat Roof



DO NOT SCALE

THESE DRAWINGS ARE FOR PLANNING PERMISSION PURPOSES ONLY
DO NOT SCALE AND ALWAYS CHECK DIMENSIONS ON SITE

3 Bethesda Rise
Rogerstone, Newport, NP10 9SY

PROPOSED

BUILD SPECIFICATION

CYTECH DESIGN

DRAWN BY:
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Revision 2

13th September 2025

SCALE
N / A

FOOTINGS UNDER ALL STEEL END NIBS TO BE CHECKED FOR
ADEQUACY. CONCRETE PAD UNDERPINNING MAY BE REQUIRED.
TO BE CONFIRMED BY CONTRACTOR.

All sizes need to be confirmed by contractor

- ALL STEEL TO SIT ON PADSTONES WITH MIN. 150mm SEATING.
- DO NOT SCALE
- ALL DIMENSIONS ARE APPROXIMATE.