

EXTERNAL WALL CONSTRUCTION

New external cavity wall to be constructed of 102mm reclaimed sandstone walling pitch face with quoins, window sills to have stone cills, heads and junks. Kingspan Kooltherm K10 cavity insulation bats within 100mm cavity, 100mm 7N concrete block with 40mm insulated plaster board dry-lining and skim. Ceramic BR3 stainless steel cavity wall ties to be spaced 900mm horizontally and 450mm vertically to comply with BS 1243 (1978). Cavity to be closed along eaves and around all openings with Camic CC50 insulated cavity chasers positioned horizontally and vertically to all openings. All openings are to be provided with Camic lintels with a minimum end bearing of 150mm at both ends. Brickwork used below DPC to be constructed in Class B engineering or trench block may be used, the cavity is to be filled within 200mm of the DPC with weak mix concrete. All new cavity walls are to be cut through to existing cavities and be continuous. U value 0.29

RAIN WATER GOODS

100mm dia. deep flow square section PVC-U gutters are to be fixed to falls on fascia boards, spitter outlets are to be 75mm dia., with 75mm square section rain water pipes with swan neck and anti-splash shoe. All pipes are to be secured with proprietary brackets and fixed with brass screws.

CAVITY TRAYS

A cavity tray must be provided above any lintel or ground floor roof, the tray must be fixed in to the wall, all cavity tray membranes must be installed directly above the lead flashings and also be provided with weep holes in at least two vertical joints.

ROOF CONSTRUCTION

Welsh blue slates laid at a pitch of 30 degrees on 50 x 25mm s/w battens on all vent felt over standard roof in a room trusses at 600mm centres. Rafters to be clipped to 75 x 100mm s/w wallplate using brass clips and strapped to blockwork with Camic type L vertical m/s straps at least one meter in length at 2 meter centres.

INSULATION

Insulation of the roof space is to be 100mm Kingspan laid between rafters with 40mm insulated plaster board over rafters with plaster skim. The insulation is to be extended over the timber wall plates off the internal wall maintaining a minimum 50mm air gap between the insulation and the sinking felt to ensure through ventilation of the roof space.

West Elevation

SKIRTING BOARDS

Timber skirting boards are to be provided to all rooms to match existing or if new 200mm x 25mm, all skirting boards are to be treated before fixing.

South Elevation

SAFETY GLAZING

Glazing in doors and windows must comply with safety regulations applicable to their locations. Information is contained in the Approved Document Part N and the Workplace (Health, Safety and Welfare) Regulations 1992.

VENTILATION

Mechanical ventilation fans are required to be fitted to all kitchen areas, utility areas and sanitary accommodation. The kitchen fans are to extract 60 litres per second or if incorporated within a cooker hood 30 litres per second will be required.

SANITARY ACCOMMODATION

Mechanical ventilation is required to provide three air changes per hour with a 15 minute over run discharging to external air and controlled by the light switch or detecting sensor. An air inlet to the room should be provided, i.e. a 10mm gap under the door.

EXTERNAL TIMBER FINISHES

All external timber is to be treated before fixing, fascia and soffit boards are to be external grade or marine ply.

DOORS

Fire doors are to be to the fire resistance indicated on the drawing. All fire resisting doors are to be fitted in a 25mm rebated door frame, doors/frame are to be fitted with insouciant strips and smoke seals. All doors are to be fitted with self-latching device capable of latching the door.

STEELWORK

Steelwork must comply with the relevant structural calculations and be supported on pad stones or spreader plates, also to be provided within the calculations. All steelwork must have a minimum of 30mins fire resistance provided by 12mm fireline plasterboard and skim. Steelwork used in external openings must be provided with a cavity tray.

ESCAPE WINDOWS

Escape windows where required are to be at least 850mm high and 500mm wide, the bottom of the window is to be not more than 1100mm and not less than 900mm from floor level.

SMOKE ALARMS

Smoke alarms are required to be fixed at ground and first floor levels and interconnected. The alarm must be wired to the main supply and connected to its own fused spur, alternatively the alarm may be connected to an interner alarm if the system is specifically designed for this purpose. A smoke detector will cover an area of 7.5m radius and a heat detector 5.3m radius, they should be fitted in accordance with BS 5839 wiring sensors within bedrooms, circulation area, land of stairways, lounge/dining rooms and roof voids. Alarms within roof voids should be fitted with a remote LED.

HEATING

Heating to be provided by low pressure radiators with a fan assisted combi boiler. The installation is to be fitted in accordance with the Gas Regulations with a CORGI registered fitter.

UNVENTED SYSTEMS

All unvented systems are to have an expansion pipe piped to the external elevation and extended down to floor level.

STAIRCASE

The new staircase shall comply with Part K of the Approved Document. The maximum rise and going for a private stair shall be any rise between 155mm and 220mm used with any going between 245mm and 260mm or any rise between 165mm and 200mm used with any going between 225mm and 300mm. The pitch of the staircase shall be no greater than 42 degrees, with a minimum headroom of 2m. The handrail is to be a minimum of 900mm high. Balustrades are to be 1m high and capable of resisting a horizontal force of at least 0.36kN/m for each meter length. Maximum openings in the balustrades shall be no greater than 100mm and rails are to be vertical so as not to allow children to readily climb the guarding. Guarding on external balconies and roof edges to be a minimum of 1100mm high and resist a horizontal force of 0.74kN/m.

WINDOWS

The window frames are to be insulated aluminium powder coated light green frames and be 1/10th of the floor and having 1/20th opening lights and trickle vents to achieve 800mm<sup>2</sup> free air flow, windows are to be fitted with double glazed units having a minimum 28mm air gap with K glass and argon filled and low-E coating. All frames are to have vertical and horizontal DPCs to all openings. Self-sealing seals are to be provided around all window and door frames to provide a water tight seal. All glazing must be carried out in accordance with BS 6362. See notes on glazing in critical locations i.e. safety glazing.

FOUNDATIONS

Foundations are to be concrete strip minimum 600mm wide x 150mm thick C25 concrete site, foundations are to be a minimum depth of 1m in clay sub-soils provide adequate frost protection in accordance with the British Standards. All foundations are to comply with the Approved Document A1 and A2 of the Building Regulations.

INTERNAL PARTITIONING

All non-load bearing partitions are to be constructed of 100 x 50mm s/w studing at 450mm centres on 100 x 75mm sole plate fixed to the floor. Partitions to be insulated with Rockwool bats for sound insulation and covered with 12.5mm thick plasterboard with a density of 10kg/m<sup>2</sup> and skim to both sides.

New Drainage

All new underground foul drainage is to be 100mm diameter underground PVC-U piping, manufactured by Hepworth Ltd, to BS 85 with flexible joints. Pipes are to be laid on 100mm bed of granular material to BS 892 1983 s.g. pea gravel. (Class 5). 100mm pipes are to be laid to a fall of 1:40, maximum capacity for 100mm pipes is 9.3 litres/sec. Drains passing under the building are to be surrounded with granular material and where passing through a suitably sized lintel shall be provided above the opening ensuring that a 50mm space is maintained all around the pipe. Openings must be masked to prevent fill. Pipes are to be fitted with a flexible joint at each side to the wall. New gullies are to be provided with rodding access. WC connections are to have vent bends and 100mm vent pipes at the head of the drain.

Rest bends are to be provided to each soil vent pipe and WC connection. Maximum direct connection between WC outlet and level of drain to be 1.5m. Rest bends are to be supported on concrete or flag base. Rainwater gullies are to be 100mm trapped with rodding access back inlet gullies are to be provided at each sink position. Waste pipes are to discharge below the grate level and above the water level.

DAMP PROOF COURSE

Damp proof course is to be provided in both inner and outer leaf of brick/blockwork the outer leaf DPC must be at least 150mm above the finished ground level, the inner DPC is to be linked with the floor damp proof membrane (solid floor construction) in the case of timber suspended floors directly under the joists.

SUSPENDED TIMBER FLOOR CONSTRUCTION

Floor to be constructed of 18mm thick T&G floor boards with a density of 15kg/m<sup>2</sup> on 244 x 72mm spaced s/w floor joists (grade SC3) at 400mm centres. Ceiling to be 12mm plasterboard nailed to underside of joists with plaster skim finish. Lateral support to be provided at 2m centres with galvanized m/s strap type L 30 x 5mm extended across 3 joists. Caisie m/s batten base strutting ref. 18185 is to be provided along mid-span of floor joist, last joist to be packed off the brick/blockwork.

INSPECTION CHAMBERS

New inspection chamber to be pre-cast or polypropylene inspection chamber if maximum depth does not exceed 1200mm. Chamber connections or for 100mm dia. pipes as indicated on the drainage drawing. Chamber to be encased with well compacted select back fill, or work mix concrete, chamber to be fitted with medium duty cover and frame. Inspection chambers are to be provided at every change of direction on foul drains, maximum distance between inspection chambers to be 45m to comply with the Approved Document Part H, any branch drain must not exceed 22m in length.

GROUND FLOOR CONSTRUCTION (SOLID)

New ground floor to be constructed, clean stone well compacted to form levels with sand blinding, 1200 gauge polythene DPM to be turned up at the edges and linked in to the DPC. Kingspan Kooltherm K3 board 70mm thick with a top layer of 1000 gauge DPM membrane, slab 200mm concrete C25 with one layer of A142 anti clacking steel reinforcement to be place 50mm from the top of the slab. U value 0.22

Part P

All electrical work required to meet the requirements of Part P (electrical safety) will be designed, installed, inspected and tested by a person competent to do so. Prior to completion the L.A. must be satisfied that either:

An electrical installation certificate issued under a Competent Person Scheme has been issued; or  
Appropriate certificate and forms defined in BS 7671 (as amended) have been submitted that confirms that the work has been inspected and tested by a competent person. A competent person will have a sound knowledge and experience relevant to the nature of the work undertaken and to the technical standards set down in BS 7671, be fully versed in the inspection and testing procedures contained in the regulations and employ adequate testing equipment.

Sockets

All electrical sockets are to be placed at a height of 450mm above floor level all light switches are to be 1200mm from floor level. lower energy light fitting are to be provided in all rooms

Domestic Boilers

All new and replacement natural gas and LPG boilers are required to have a minimum SEDBUK (Seasonal Efficiency of Domestic Boilers in the UK) rating of 85%.

Oil Fired Boilers must have a minimum SEDBUK rating of 85%.

Sound Insulation (Partitions)

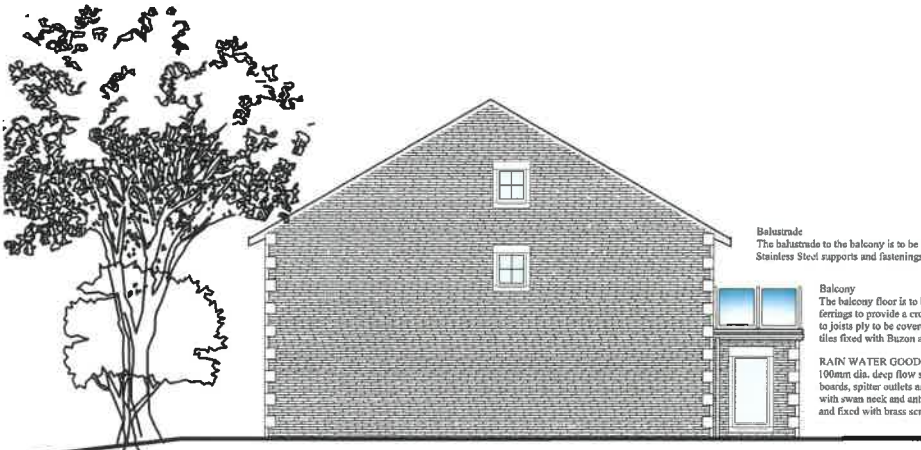
75mm glassfibre insulation to be placed into all partition walls, Floor Acoustically 15 to be laid on all upper floors for impact noise to comply with Part E.

INTERNAL PARTITIONING - SOLID FLOOR

Partition walls constructed of concrete floor slab are to be 100mm thick lightweight blocks, any internal load bearing partition walls are to be constructed from 100mm solid concrete block and taken down to strip foundation or constructed on reinforced concrete slabs.

TOP WATER DRAINAGE

All top water drainage are to be 100mm underground PVC-U or Supersealove with flexible joints piping to be laid at a minimum fall of 1:40. Drains passing under the building are to be protected by surrounded with 100mm (min) granular material and where passing through a wall a suitably sized lintel is to be provided over the opening ensuring that a 50mm space is maintained around the pipe. Openings must be masked to prevent fill. All underground drainage to comply with BS 8301 (1985), new gullies to be provided with rodding access, separate drainage systems are to be combined at the last manhole depending on existing drainage systems.



East Elevation

Balustrade

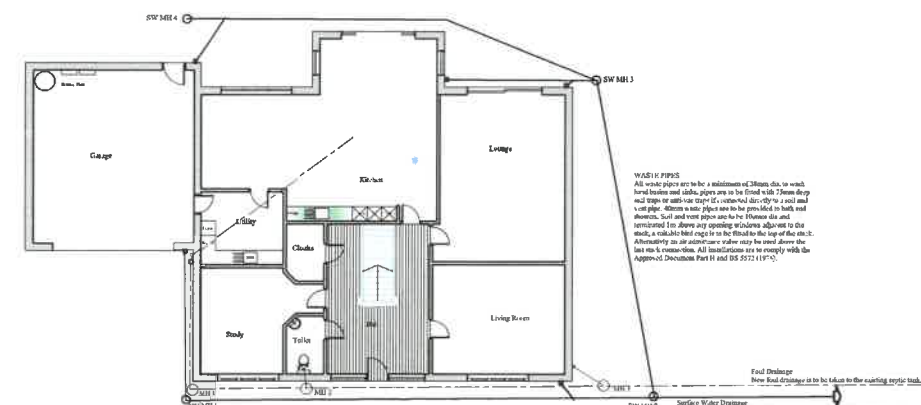
The balustrade to the balcony is to be laminated glass 1.1m in height with Stainless Steel supports and fixings

Balcony

The balcony floor is to be 175x75mm timber joists at 400mm c/s, with fixings to provide a cross fall, 22mm external plywood decking screwed to joists ply to be covered with GRP fibreglass and then promenade stone tiles fixed with Bazon adjustable support system

RAIN WATER GOODS

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DRAINAGE PLAN

New Drainage  
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Client:  
**Mrs Anna Schofield**

Location:  
**ASHCROFT, Mill Lane,  
Waddington BB7 3JJ**

Project:  
**Demolition of the existing bungalow and the construction  
a Detached House & Garage with turning space**

Drawing:  
**Planning Consent**

DO NOT SCALE THIS DRAWING