NEW GROUND FLOOR CONSTRUCTION

New insulated ground bearing floor slab / floor slab to be formed as follows: Lay 150mm well consolidated selected hardcore -

Maintain air void of 150mm to the the underside of the new concrete precast beam and block floor (Bison, RMC or Douglas) laid in strict accordance with manufacturers details.

Above B&B floor blind, then cover with 'Visqueen Gas Barrier' or similar approved radon barrier fitted fully in accordance with manufacturers approved details. Above radon barrier lay Celotex Tuff-R GA3075Z flooring insulation strictly in accordance with manufacturers instructions & details (ensure Celotex Tuff-R GA3025Z laid around perimeter) with vapour control layer laid above insulation boards and finished with 75mm sand cement RC 35 screed power float finished to take floor finish to Clients choice.

NEW EXTERNAL WALLS

Cavity walls comprise 100mm outer leaf blockckwork to BS 3921 and Local Authority

approved sample with 110mm cavity incorporating 60mm Cellotex tuff-R CW3060Z insulating boards laid in accordance with manufacturers details to achieve an overall U-value of 0.30W/m²K;

100mm concrete block to BS6073-1, internally with 12mm base render coat and 3mm Gypsum plaster wall finish.

Mortar mix for masonry walls $1:1\frac{1}{2}:6$ (Cement:Lime:Sand) above ground, $1:\frac{1}{4}:3$ below ground. Cavity to be tied with vertical twist pattern stainless steel ties with spacer insulation washers. Ties spacing and type to be confirmed by Structural Engineer allowing for them to be doubled at all reveals, openings etc. Close cavity at eaves level

Provide Thermabate or similar approved insulated cavity closers at all window and door jambs and beneath window cills.

Weepholes: Leave perpends at 900mm centres above base of cavity, external openings and stepped dpc's. Not less than two weepholes to be provided over openings.

Note:

Expansion Joints to be positioned in external walls in accordance with Brick/Block manufacturers approved details.

WINDOWS/DOORS

Install standard/purpose-made white UPVC windows to meet approved style and Clients specification allowing for for all security locks and fastenings as may be required by the client or his insurers. Similarly all

obscure glazing. All windows and glazed doors to be double

glazed with 16mm air gap and low 'E' coating, sealed units. Window boards to be MDF with rounded edges and returned ends with secret fixings to meet Employers requirements.

Install GRP faced through coloured front door with hardwood frame and hardwood cill to meet Employers requirements and guidelines set out in "secured by design" document.

Glazing at doorways and in doors below 1500mm, low level and other risk areas below 800mm to be of toughened safety glass.

DPC

Provide horizontal and vertical DPC's to cavity walls at all door and window openings and. Also at floor level - 'pitch-free' -Xtra-load Elite or similar approved. horizontal dpc's to be min 150mm above ground level horizontal dpm's to be - 'Visqueen Gas barrier' or similar approved (min 1200 gauge). All joints in dpc or dpm to be lapped and sealed in accordance with manufacturers recommendations.

FOUNDATIONS

Class A concrete blocks below ground level in all foundations. Cavity filled to 225mm below DPC level. DPC positioned 150mm above ground on line with existing.

Foundations - to be approved by Building Control Inspector Trench bottoms to have Building Control approval before any concrete poured. Install 3 courses bricks below GL dpc to outer leaf only

ROOFING

Provide new tiled roof - All to manufacurers details for span of timber members and water-proofing requirements. Manufacturer of timber joists to be TRADA approved. Design to be in accordance with BS 5268. Trussess / joists to be designed to be capable of carrying a uniformly distributed imposed load of 1.5KN/m² on bottom chords/ceiling ties/joists. All joist dimensions must be checked on site prior to manufacture and all details and calculations must be submitted to the building control dept of the local authority prior to the Joists being erected. Maintain airway gap into roof void using proprietry ventilation products in conjunction with ventilators. Tyvek HD Plus breather membrane as manufactured by Klober Ltd. (fixed by \marine ply / tiling battens) with 150mm min overlaps, providing through ventilation to roof void. For insulation lay 170mm mineral wool quilt between Joists (or as recommended by building Inspector) at ceiling level..

WALLPLATE

75x100 wall plate bedded to top of load bearing walls with 2.5x30x1000 long restraining straps at max 1800 centres plugged and screwed to walls.

5x30x1500 long galvanised steel restraining straps at max 2000 centres to be built into cavity walls and secured to three rows of trusses where running parallel to walls at ceiling level and at verges. at eaves, straps to be secured to every third truss and built into cavity wall.

VENTILATION

All new windows to be fitted with trickle ventilators equivalent to 4000 sq mm in WC's and kitchen. All other rooms equivalent of 8000 sgmm.

Provide mechanical extract fan ventilation to kitchen discharging to the external air at a rate of not less than 60 L/sec. or 30 L/sec if through cooker hood.

Provide mechanical ventilation to utility rooms at a rate of 30 L/sec Ventilation fans to BS 848 and BS EN 60335-2-80 - Nuaire Home Ventilation Itd "Drimaster 365" or similar approved by Employers Agent. All fans to be fitted with electronic humistadt, manual overide and back draught shutters.

Eaves ventilation by Ubbink or similar approved to be OFVS/L with insulation/spacer tray fixed to rafters to all eaves to provide cross ventilation

PLUMBING

Provide 110mm soil and vent pipes with 100mm connection from wc's, 50mm wastes from kitchen sinks, 38mm wastes from showers and basins with 75mm anti-syphonage traps. All wastes to be fitted with access eyes at all changes of direction for purposes of maintenance and cleansing. Ventilation stacks to terminate with a balloon grating 900mm above highest opening window, or if positioned internally, be connected with flexible ducting to an approved roof tile/slate terminal vent or fitted with 'Durgo' air admittance valve in accordance with approved document H1 **RAINWATER GOODS**

Provide 100mm brown deepflow pvc gutter (osa) and brackets or Local authority approved alternative. Provide downpipes 65mm dia from gutter to discharge over sealed access point to drainage system all in accordance with approved document H3 All materials fixed to walls/rafters in accordance with manufacturers instructions. SOIL AND VENT PIPES

Soil pipe boxing to consist of softwood framing and 2 layers of 12.5mm plasterboard and skim with mineral wool insulation quilt (min 25mm) in void. Boxing to be continuously carried up to roof space for soil and vent pipes or provided with air grills where an air admittance valve is used.

Stacks passing through floor voids to be fitted with intumescent pipe collars

Access points to be provided in bathrooms and kitchens at junction points

DRAINAGE

install new back inlet gullies to connect general appliance wastes to drainage system and inspection chambers

pipeworks laid at self-cleansing gradients as noted on layout plan. All buried drains shall be 100mm UPVC Marley/Osma Pipework (or similar approved) constructed on 75mm thickness of shingle or pea gravel granular fill and granular surround (ne.10mm). Connecting to FW MH discharging to existing public sewer.

sink wastes to be connected to gullies via 38mm dia pvc waste pipes and 75mm anti-syphonage traps

SW drainpipes to be bedded on 75mm thickness of single sized shingle or pea gravel and to be of same approved pipework as FW drains.

DRAINS PASSING THROUGH WALLS/FOUNDATIONS allow for providing arched or lintel opening to give 50mm clear space all round the pipe where passing through walls, or sleeves through concrete foundations mask opening both sides of wall with rigid sheet material to prevent entry of vermin or fill

MANHOLES

Construct manholes/inspection chambers in 225mm Class B clay engineering brickwork to BS 3921 min compressive strength 21N/sqmm in 1:1/4:3 (cement:lime:sand) mortar mix built off 150mm concrete base with concrete benching and 40mm fine concrete grano topping trowelled smooth at upward gradient of 1 in 12 away from centre line of channel, channels formed in glazed halfround pipes

New gullies to be salt glazed surrounded with a minimum of 100mm concrete.

covers and frames in pedestrian and grassed areas to be Class B Grade B and those in areas subject to wheeled traffic to be Class E Grade A

ABUTMENTS

At abutments of roof with any wall, where appropriate install cavity tray. Elsewhere provide stepped lead flashing over roof tiles into wall, tuck in, wedge and point with cement mortar. Apply clear silicon waterproofer above flashing to eaves or verge.

LEAD FLASHINGS To comply to BS 1178 & CP 145 PT2 all flashings and soakers to be code 4 lead and coated in guick drying weathering oil

LINTELS

Provide standard pattern catnic or similar approved steel corrosion treated insulated cavity lintels - sizes as for manufacturers recommendations for clear spans - min end bearing 150mm Provide weep holes at max 450mm crs to stop ended cavity trays and lintels in external cavity walls. Stepped cavity trays to be provided with weep holes at least to lowest trays, weep holes to be approved proprietry insert type

HOT AND COLD WATER INSTALLATION

All dwellings are to be connected to individually metered water supply. Stop taps to be located at entry points of each dwelling and will include a drain valve.

Where pipes are laid in floors they should be incorporated within a ducting with removeable screwed access panels and designed to incorporate floor finishes. Provide accessible hot and cold water supply with suitable washing machine tap connectors located within adjacent sink base unit. Provide a neat pre-drilled 50mm diameter holes in sink base check for water connections.

Thermostatically controlled mixer values to be fitted to all pipework to taps excluding taps on kitchen and utility room sinks.

ELECTRICAL INSTALLATION

To be in full compliance with the latest IEE Regulations The installation to include power and lighting circuits with alterations/additions to existing circuits as necessary All in accordance with BS 5839 All fitments provided and located as scheduled by drawings. All switch and socket outlets to be located between 450 min and 1200mm max from finished floor level.

FITMENT TYPE

Light switches Power socket outlets and spurs Power socket outlets and spurs above worktops (in kitchens) Power socket outlets and spurs below worktops (in kitchens) Cooker control unit Immersion heater control Room thermostat/time clock TV aerial socket Bell push (front door) Unswitched socket outlet Shaver point and strip light

LIGHTING

Internal light fittings to have a luminous efficacy greater than 40 lumens per cicuit (fluorescent lamps) watt in accordance with the Building Regulation Approved Document 'L' All external light fittings to be fitted with a PIR light sensor to ensure light automatically extinguishes when there is no light and when not required in accordance with Building Regulation Approved Document 'L'

SMOKE DETECTORS

Smoke detectors to be provided in positions agreed with Building Control Officer. Alarms to be electrically operated on a separate fused circuit all interlinked, or with battery back-up if on lighting circuit. Alarms fitted to ceilings at least 300mm from light fittings or wall, in accordance with BS 5839 Part 1. Alarms must be positioned not more than 3M from every bedroom door and not more than 7M from every door to a

living room or kitchen All wiring to conform to latest IEE regulations

WASTE STORAGE

Provision for the storage of waste to be provided in accordance with Approved Document 'H'. Storage to be provided for two moveable, individual waste containers. Provide free draining concrete slab, plan area 1.2 x 1.2m and min 100mm thick.

Fitment positions (as measured from finished floor level to the bottom of the accessory):

HEIGHT 1000mm 500mm (1000mm in wheelchair houses)

1050mm

500mm 1050mm 1000mm 1000mm 500mm (1000mm in wheelchair houses) 1000mm 500mm (1000mm in wheelchair houses) 1800mm

'Durgo' or similar approved air admittance valve fitted in accordance with manufacturers details

Soil pipe boxing to consist of softwood framing and 2 layers of 12.5mm plasterboard and skim with mineral wool insulation guilt in void. Boxing to be continuously carried up to roof space for soil and vent pipe and provided with

Soil and vent stack to have a metal cage installed at terminal outlet to discourage rats leaving the drainage system and a proprietory rodent barrier provided to prevent rats climbing the discharge stack.

Soil and vent stacks to be fitted with access plates for rodding and cleaning

air grills where an air admittance valve is used.

FOR LOCATION PLAN (REFER TO SHEET 1)

PROPOSED REAR GROUND FLOOR SINGLE STOREY AND 1ST FLOOR SINGLE STOREY EXTENSION ABOVE GARAGE

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4. HEN FRON, EN ERGLYN, CAERPHILLY.