

















DETAIL



1:10 @ A1 (1:20 A3)





-120-

90x38mm Timber stud work @ 600mm cts. OR 90mm Gypframe metal 'C' stud formwork 70mm Knauf Earthwool Flexible Slab insulation - minimum density 10Kg/m<sup>2</sup>. - 12.5mm plasterboard & skim (2.5mm) - Allow for patress where required for fittings. Provide additional noggins or Knauf Performance Plus/Fermacell Board (in lieu of the plasterboard) to the face of studs where support is required. Generally Plasterboard each side and skim (MR moisture resistant to wet areas). Finishes and decoration to Clients choice/specification





## To achieve 0.16W/m2 K - Actual 0.13 W/m2 K

- 12.5mm plasterboard & skim
- -Herringbone strutting to mid span or to engineers design
- -Flat roof 210mm pozi joist @ 400mm cts to
- specialist / engineers design Timber fillet to falls 1:60
- -18mm WPB plywood deck
- -Vapour control layer, bitumen based Bauder Duo 35 or similar by 160mm Kingspan Thermaroof TR26 insulation mechanically fixed 1.6mm Single ply roof covering - Sarnafil or similar to specialist desi

4 DETAIL 1:10 @ A1 (1:20 A3)

BUILDING CONSTRUCTION SPECIFICATION NOTES Building Regulation compliance notes to be read in conjunction with the current Building Regulations/Approved Documents (including amendments) relevant codes of practice and British Standards (BS). Generally all construction is based on Accredited Construction Details with adaptation for our Local Authority, i.e. radon construction details etc. All Subcontractors and Specialists must be competent and members of their respective trade bodies to allow self-certification of their work. i.e. this applies to window and door installation, electrical and heating including Gas Safe etc. Any controlled service installation is to be designed and installed to current standards as dated at time of construction with commissioning certificates issued to Client/s and Local Authority on completion. Demolition/Excavation work to be carried out by

competent/licensed persons and due care and attention to be given in relation to existing services/hazards. Standard of workmanship to BS 8000 as per Approved Document to support regulation 7 (Materials and workmanship).

Electrical installation to be designed, installed & tested to BS7671 - Certificate to be issued to the local authority on completion.

ADDITIONS TO NOTES REQUIRED BY BUILDING 1) Pozi joist roof design & calculations. 2) percolation tests for soakaway

Required for submission to building control prior to installation.

### **GROUND CONDITIONS:**

The excavations are to be inspected by Building Control Officer. If the ground conditions are found not to be normal or consistent, if there are sulphates present, or any evidence of mining activity, then the Structural Engineer must be consulted and the foundation design should be modified and agreed with the Building Control Officer.

## FOUNDATIONS:

External walling, 650x225mm (Min) concrete strip foundations 1:3:6 to L.A. approved depths 600mm min. (450x225mm to 100mm internal and sleeper walling where required) OR to engineers design dependant on ground conditions.

GROUND FLOOR (TYPE A) Floor finish to client spec. (20mm nominal allowance) 50mm fibre reinforced screed on 500g vapour barrier on 100mm Kingspan K103 dense insulation board on 1200g damp proof

membrane (linked & sealed to perimeter cavity trays) on 150mm concrete floor slab laid over 150mm min. sand blinded hardcore. RADON SUMP:

In positions shown, located in hardcore zone. taken to external air and capped.

#### EXTERNAL WALLING (TYPE A):

Outer leaf consisting of 20mm c.s. render on 100mm 3.5 N/m2 dense concrete block work , 150mm overall cavity, 50mm residual cavity, Kingspan K108 100mm dense insulation board, finished with sealing tape to all abutments with inner leaf consisting of 100mm 3.5 N/m2 dense concrete block work and skim finish internally. Jambs open, closed by insulated uPVC. Cavity closed at top of walling with approved closer (calcium silicate board). Catnic heavy duty steel lintels with 150mm min. bearings. Ancon or similar stainless steel ties @ 450mm cts vertically & 750mm horizontally. Weep holes to Hyload perimeter cavity trays @ 1.0m cts. External DPCs 150mm min. AFGL. Concrete lintels to all pipe/wall intersections. c.s. render

# externally.

**INTERNAL PARTITIONS:** 90 x 38mm studs @ 600mm cts lined both sides with 12.5mm plasterboard & skim. 70mm Knauf Earthwool insulation between studs. Foil backed board or vapour check barrier to all wet area walling e.g. bathrooms etc...

### ROOF - FLAT, WARM ROOF:

Saranfil or similar single ply membrane on mechanically fixed 160mm Kingspan Thermaroof TR26 insulation laid on Vapour control laver, bitumen based - Bauder Duo 35 or similar by specialist on 18mm plywood deck on pozi joists @ 400mm cts to BS5268 part 3. Restraints to 50 x 100mm wall plates @ 1.8m cts three blocks deep, Code 4 (equv.) lead to all abutments & valleys etc.

WINDOWS & DOORS:

To be in accordance with BS6206. in uPVC construction, double glazed (4-20-4 Argon filled), 5% of room area to open, safety glazing (to BS6206) below 800mm AFFL also to doors & sidelights, All glazing to be low 'E' 1.6W/k. (1.8W/k to doors) AFFL. 8000mm<sup>2</sup> controllable trickle ventilation. Provide 30 minute fire rated insulated DPC cavity closers to the opening reveals to curb moisture/cold-bridging. Allow for DPC under the cills and related leadwork as applicable.

Provide easily accessible doors and windows that have been certified to PAS24 or equivalent security standard.

In addition to opening windows above, 30L/sec. kitchenette extracts, for w.c, rooms 15L/sec. All fans capable of intermittent operation with over run - (in the event of windowless room, extract fan to have 15 minute over run, also 10mm gap under door is required)

In positions shown, ceiling mounted, mains powered with battery backup & linked. All to BS 5446 pt1. Sited a minimum 300mm from ceiling mounted light fittings. Alarm in kitchen to be a heat detector. Ensure detectors are within 7.5m from nabitable rooms

Combustion appliances if installed are to be set no closer than the minimum clearance tolerances. Adjacent building fabric to be solid non-combustible material such as masonry/concrete. Provide a battery powered Carbon monoxide alarm if required (with low battery life warning alert) to comply with BS EN 50291:2001 Locate alarm in same room as appliance at least 300mm from any wall and between 1m and 3m horizontally from the appliance (further details on suitable locations refer to BS EN50292: 2002).

LIGHTING: Energy efficient light fittings to be used with dimmer controls to all habitable rooms & circulation areas, minimum of 1 fitting per 25m2 floor area to entire building, OR 75% light fittings (whichever is greater) lighting to have luminous efficacy greater than 45 lumens per circuit watt. System efficiencies of each fixed building service should be at least as efficient as the worst acceptable value for the particular type of appliance. The following considerations are to be made where downlight

(spotlight) units are proposed to be inserted into ceiling/roof

The required Fire Rating of the Ceiling/Roof zone in the area of proposed insertion. • The required Acoustic Rating of the Ceil/Roof zone in the area of proposed insertion. • The Fire Rating of the downlight/s (spotlight/s) specified

to be used. • Heat dissipation (space) requirement for safe operation. Weight of any insulation build-up above the units breaking the potential Fire or Acoustic seal between the unit and ceiling line (heat dissipation is also an issue in this case along with aesthetics).

• NOTE: The original insulation integrity (thickness) to be maintained as necessary to these areas. Therefore, related/suitable downlight (spotlight) hoods are to be provided above in these locations.



## VENTILATION:

### FIRE ALARMS:

## DISABLED PERSONS PROVISIONS:

Switches, sockets & other outlets to be at heights varying from 450 - 1.100m high as required by part M of the building regulations. Ground floor doors & entrance to use minimum 838mm wide doors.

### HEATING:

Electric panel heater system installed to specialist design. Operation & maintenance instructions to be clearly visible (all details of heating system to be forwarded to building

## Generally all installations by competent person/s that are members of their respective trade bodies (Gas

Safe/MCS/OFTEC/HETAS etc) to allow self certification of their work

## ELECTRICAL

Existing power feed to be checked and upgraded if required . All electrical works will be designed, installed, inspected and tested in accordance with BS 7671 (IEE wiring regulations 17th edition) self certification scheme or a suitably qualified person with a certificate of compliance produced by that person to the Building Control Surveyor on completion of the works.

## PLUMBING (F.W.WASTE):

32mm wash hand basin wastes, 40mm sink wastes, all with 75mm deep traps to 100mm PVC soil vent pipe with rodding access to foot, (termination 900mm above window level or tile/ridge vent) to 100mm dia. PVC underground drainage, laid n 150mm pea gravel surround to 1:60 min. falls, concrete lintels to all pipe/wall intersections. 450mm inspection chambers where shown to a maximum invert of 1000mm . Deep manholes

#### to detail - Outfall to existing mains F.W. sewer All sanitary pipework to flow into soil and vent pipes. Systems to be designed and installed by a competent registered plumbing engineer and to be in accordance with BS EN 12056 "Gravity drainage systems inside building". Should waste pipe

runs be excessive in relation to the recommendations of BS EN 12056 then consideration should be given to increasing pipe sizes and/or using anti-syphon traps.

#### F/W MANHOLE-INSPECTION CHAMBERS: All vertical pipes and SVP bends to be surrounded in concrete.

Inspection chambers to be Polypropylene or GRP bedded on and surrounded with 150mm concrete: 450mm dia. for soil drains (for depths of 1000mm or less) and 225mm dia. for surface water drains. For depths more than 1000mm use a proprietary concrete system or construct 140mm concrete block work manholes, waterproof rendered internally, with 150mm concrete base, and 150mm C35 concrete cover slab reinforced with A142 fabric and fitted with 600mm x 450mm robust cover and frame. Internal manhole/inspection chambers to be sealed type where applicable.

### S.W.DRAINAGE:

100mm uPVC gutters to 65mm downpipes with rodding eye to foot to 100mm dia. PVC pipes & fittings to soakaway system 5.0m min. from any structure, subject to percolation tests.

### FIXED SERVICES:

All fixed services i.e. Heating & hot water systems, cooker, electrical & water installations etc.. are to have operation & maintenance sheets to be kept attached, on or near appliances supplied by their installer, also to show dates, qualifications and maintenance routines.



**BREG** Notes

Prawing number / Ref

Dwg Date

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3 of 3 May - 24

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Scale @ A1

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