DO NOT SCALE THIS DRAWING

ROOF

Roof assembly to achieve 0.2W/m2 K with min. clear ventilation of 25mm at eaves and 50mm through the roof.

Roof tiles with min. 100mm head lap and 345mm max. gauge fixed with 50 x 3.35 aluminium clout head nails through to OS treated 25mm x 50mm battens fixed to OS treated rafters with Dupont Tyvek Supro membrane between.
60mm battens to allow air space to be fixed to rafters with 90mm Celotex tuff-R Zero GA3000Z insulation between rafters and 40mm thk GA3000Z beneath with taped joints finished with 12.5mm foil backed gypsum plasterboard and plaster skim.

Roof bracing shall be in accordance with BS5268:Part 3:1985

All perimeter tiles to be clip fixed.

Each rafter is to be fixed to masonry with proprietary 30 x 5mm x 1000mm long galv mild steel strap.

WINDOW / GLAZED DOORS

Window assembly to achieve 1.8 W/m2K 'U' value.

Hardwood / UPVC windows with internal beading and integral night vent (providing 8000sqmm) operation, 100mm restricted opening with key overide for reversible operation for cleaning.
Operable window lights to be equivalent to 5% of room floor area.
Sealed double glazed units with 16mm cavity and low-e glass, Class B safety glass to BS6206, toughened or laminated to all glazing below 800mm from FFL or when within doors and side panels.

Note all replacement windows to be supplied and fitted by a FENSA registered contractor.

FLOOR

Floor build-up to achieve 0.22W/m2K U value.

For new solid floor (where used):
Min. 150mm clean well compacted hardcore, 50mm sand blinding, 1200 gauge virgin polythene DPM, 60mm thick Kingspan Thermafloor TF70, 500 gauge polythene isloation membrane, 150mm thick reinforced concrete slab with float finish. Allow 19mm zone for top finish as determined by Client. New finish level must line through with existing.

FOUNDATION (on low rise only)

To BS8004:1986.
Use grade ST1 concrete to BS5328:Part 2
Min. 600mm wide x 300mm deep strip foundation to be taken below invert level of existing drainage to firm bearing strata min 675mm below ground level or as required by Building Control Inspector to suit ground conditions.
Foundations must not bear onto drains.

BELOW GROUND DRAINAGE

Drains under building shall be re-laid with sealed joints and have access points outside the building.
Encase new connections and any existing drains in min. 150mm concrete; grade GEN1, where located under floor or within 900mm of building or under hard standing.
Use bitumen-impregnated fibreboard movement joints at pipe junctions.

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WALL

Wall assembly to achieve min 0.35W/m2K 'U' value. Constructed to BS5628:Part 1:1978 and Part 3:1985

CAVITY and INSULATION
90mm cavity zone with 45mm clear cavity and 45mm thk Celotex CW3000 insulation
OUTER & INNER SKIN
Outer skin - facing brickwork to match existing.
Inner skin - 100mm thk Hanson Fenlite (7.3N/mmsq, 1350kg/m3, 0.48 W/mK) with 2 coats light density plaster and skim internally.

CHASES
Vertical chases shall not exceed 30mm.
Horizontal chases shall not exceed 20mm.
WALL TIES
Catnic BW4 / 225 wall ties with Universal IRC 85 insulation retention clips to be fixed at 750mm centres horizontally and 450mm vertically, reducing to 225mm centres at jambs.
BED JOINT REINFORCEMENT
2 courses above lintels and below cills to incorporate Murfor bed joint reinforcement mesh extending a minimum of 300mm beyond lintel / cill.
MORTAR *(proportion by dry volume)*
To BS5628:Part 1:1978
Designation iii above DPC level
1 : 1 : 6 cement : lime : sand
Designation ii mortar for below DPC
1 : 0.5 : 4 cement : lime : sand
DPC
Ruberoid Hyload original or similar 150mm lap at joints. Insulated DPC; such as Rockwool Rockclose, shall be used at door and window jambs
OR
a cavity closer; such as Thermabate 90.
CAVITY TRAYS
Cavity trays shall be pre-formed and include stop ends,
LINTEL
Concrete lintel must be provided over any drains passing through masonry.
Catnic CGE 90 /100 closed eaves at roof level CG90 / 100 open back lintels elsewhere, min lintel bearing shall be 150mm.

SUMMARY OF WALL CALCULATION

Layer Thickness (mm) Conductivity (W/m.K)
Outer leaf 102 0.77
Air space 55 r = 0.64
Cavity ins 45 0.023
Inner leaf 100 0.48
Internal finish 13 0.18
Area of wall ties: 12.5 mm²
Wall ties per square metre: 2.5 /m²
Conductivity of wall ties: 17 W/m·K
U-value of the wall = 0.31

MECHANICAL AND ELECTRICAL SERVICES

Hot Water Storage and Space Heating

All systems shall be installed by a competent person.
Gas fired boiler shall have a min. SEDBUK rating of 78%. Zone, timing and boiler interlock controls are to be provided.
The name, make, model and type of the hotwater system shall be adviced to the Building Control Officer for approval prior to order and installation.

The Water Supply (Water Fittings) Regulations 1999 are also to apply.
Pipework to be insulated.

The building occupier is to be provided with information on the operation and maintenance of the heating and hot water system.

Ventilation

Extract fan with an extraction rate of 30 litres/sec is to be sited adjacent to the cooking hob in the kitchen.

An extract fan with an extraction rate of 6 litres / sec with a 15 minute overun is to be fitted to WC operable by the light switch.
A 10mm gap is to be provided beneath the door for displacement air purposes.

Lighting and Electrical Works

All works must be completed by a NICEIC or ECA registered person in accordance with AD Part P and applicable completion certificates issued.
Generally fittings with compact flourescent lamps are to be installed.

Detection

Smoke alarms: with battery back-up shall be powered from mains supply on a single independent wired / RCD circuit and conform to BS 4336:Part 1. Optical types shall be used in hallways and landings and ionization chamber types to living and dining rooms. Alarms to be linked and be sited within 7.5m of every habitable room door, generally fixed to ceilings 300mm away from walls or similar obstructions.

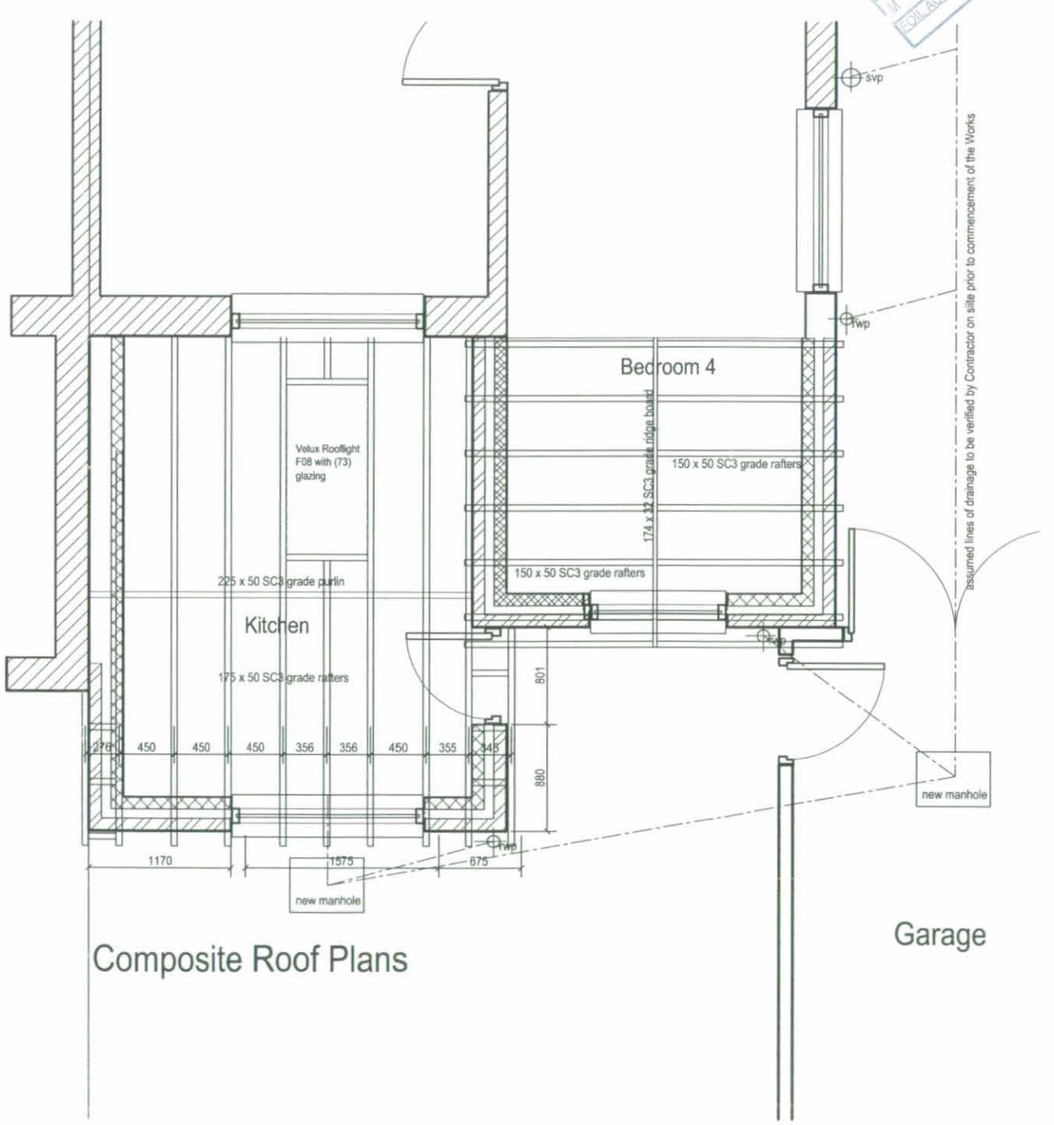
Sanitary Pipework

All points of discharge shall be fitted with a trap under which working conditions shall maintain a minimum seal of 25mm.

PERFORMANCE REQUIREMENTS

All products, processes, installations and workmanship are to be in accordance with the latest applicable BS EN standards at the time of installation. Manufacturers recommended installation procedures to be followed in all instances.

It is a requirement to avoid thermal bridging and air leakage at material interfaces and junctions that good workmanship be maintained at all times.



Composite Roof Plans

PLANNING
21 JUL 2010
INIT. RECD DATE
FOR ACTION

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NORTH

MATERIALS

Roof
Smooth black tiled roof

Walls
Smooth red facing brick to match existing walls.

Windows
Double glazed UPVC windows.
Profile to match existing windows.

Fascia Boards
Self finished white composite board or treated timber with gloss paint finish.

Rainwater Goods
Through coloured PVC (black).

CLIENT
Mr M MAQSOOD

PROJECT
REAR EXTENSION

Location
8 Gatling Avenue
Longsight
Manchester
M12 5SX

DRAWING TITLE
PROPOSED Extension Plan & Notes

Scale @A3: 1:50
Status: PL / BC

Project Ref.: **1002**
Dwg No.: **03**
Rev.: **-**

m e architects ltd