

# GENERAL SPECIFICATION SHEET

## MASONRY

Class B Engineering brickwork to be set in 1:1:4 mortar. 20N concrete common brickwork and 7N concrete brickwork to be set in 1:1:4 mortar. 2.8N blockwork to be set in 1:1:6 mortar. Movement joints to be incorporated at max. distances as recommended by material/product supplier.

## GLAZING

Any glazed window area between floor level and 1500mm above that level and any glazed area between floor level and 1500mm above that level in a door and any glazed area within 300mm of door casing must be fitted with toughened safety glass to suit table in paragraph 4 section 1, document "N" of 1991 Building Regulations. External glazing to be 24mm gap double glazing argon filled (for B) Pilkington Kappedout or similar. U value 1.7W/m<sup>2</sup>K.

## CONCRETE

All concrete to be ready mixed. Designed mixes to B.S. 5328, obtained from depot accredited by Quality Scheme for Ready Mix Concrete. All workmanship to comply with B.S. 8110 Part 1 Section 6.

## GRADE C20

For strip footings, padstones, unreinforced bases and unreinforced concrete. Min. cementitious content 220 kg/m<sup>3</sup>.

## GRADE C35

For floor slabs and reinforced concrete. Min. cementitious content, 300 kg/m<sup>3</sup>.

## ALL CONCRETE GRADES

Nominal max. aggregate size 20mm workability 60mm slump.

## REINFORCEMENT

Mesh to B.S. 4463, bars to B.S. 4449, bent and cut to B.S. 8666. 2000. Mesh laps 350mm.

## COVER

75 to minimum earth faces, 40 to shuttered faces and to u/s floor slab, 50 to top faces, min.

WALL INSULATION TO WALLS SHOULD BE SUITABLE RIGID FOAM SHEET THICK OR BE PROVIDED BY OTHER MEANS TO COMPLY WITH A "U" VALUE OF 0.25W/M<sup>2</sup>K. ROOF INSULATION SHOULD BE CONFIRMED AS BEING POSITIONED BETWEEN AND OVER THE CEILING JOISTS, 125MM BETWEEN AND 150MM @ EAVE ABOVE. PROVISION MUST BE MADE FOR LIMITING AIR LEAKAGE FROM THE BUILDING BY SEALING OF INSULATION ELEMENTS AT THEIR JOINTS AND THE GENERAL SEALING OF CONSTRUCTION JOINTS AND SERVICE PENES WHERE THEY PASS THROUGH THE STRUCTURE. WINDOWS DOUBLE GLAZED UNITS TO HAVE MIN. 16mm AIR GAP AND TO HAVE A LOW "U" COATING. THE CONTRACTOR IS TO IDENTIFY THE EXACT LOCATION OF ALL UNDERGROUND SERVICES AND DRAINS. THE CONTRACTOR SHALL PROVIDE ANY TEMPORARY PROPPING, NEEDLE BEAMS, PLANKING OR SUTTING ETC. NECESSARY TO MAINTAIN THE STABILITY OF THE EXISTING STRUCTURE AND ADJOINING STRUCTURES AND OF THE EXCAVATIONS DURING THE COURSE OF THE WORKS. THE GUIDANCE IN "BUILDING RESEARCH ESTABLISHMENT GOOD BUILDING GUIDES Nos. 15 & 21 - "PROVIDING TEMPORARY SUPPORT DURING WORK ON OPERINGS BY EXTERNAL WALLS" AND "REMOVING INTERNAL LOAD-BEARING WALLS IN ORDER OF DOWELING".

## STRIP FOUNDATIONS

Clear site of all vegetable matter, top soil etc., and excavate to dimensions shown, lay strip foundations to width and thickness to suit L.A. requirements in grade C20 concrete containing min. 260kg O.P.C. per m<sup>3</sup>. Foundations shown are to suit natural ground conditions having a safe bearing capacity of 100kN/m<sup>2</sup>. Where found, 1 linear metre of any drain then found, strip should be excavated to min. invert level of drain in question. Found to have min. 900mm cover, and excavations to be to B.S. 8000 part 1.

## EXTERNAL WALLS

Cavity walls to be constructed as shown with materials stated. Austenitic steel wall ties to be inserted for stability of 450mm min. vertical / 750mm min. horizontal and doubled up at side of openings and 900mm min. rise. ties to have min. 50mm embedment in each leaf. Invert vertical D.P.C. round all new door and windows openings. Lay bitumen based (or sim. approved) horizontal D.P.C. in all walls at min. 150mm above ground level. Cavities to be firestopped at roof level. All walls to be filled with rigid insulation to meet current requirements of U value: 0.35W/m<sup>2</sup>K.

## STEEL BEAMS

R.S.J.'s and U.B.'s and cattle limits to be supported by grade C25 conc. padstones to sizes specified by consulting structural engineer and encase in fireproof p.k.d. to manufacturers instructions and skin. A clear headroom of 2000mm should remain after positioning any steel beam in a habitable room.

## VENTILATION

Habitable room ventilation should be provided by one or more ventilation openings with a total area of at least 1/20th of the floor area of the room with some part of the ventilation min. 1750mm above floor level. Kitchen & Utility rooms to have rapid mechanical ventilation rated at 60litres/second and maybe operated intermittently. Bathroom rapid mechanical ventilation should be provided with either mechanical extract ventilation rated 15 litres/second which may be operated intermittently. All habitable rooms to have controllable and secure background ventilation openings of 8000mm<sup>2</sup> min. located so as to avoid undue moisture.

## PARTITIONS

Construct partitions in position shown in 100x50mm studs faced both sides in Gyproc wallboarding and skin, insulate between framework using 100mm fibreglass quilt. Studding to be negged to floor/roof members at 600mm ctrs.

## DRAINS

Soil and storm drains to be laid at falls of not less than 1 in 40 and are to be encased in grade C25 concrete in the event of passing beneath building. Where any drain passes through a load bearing wall, lay 150mm deep x wall thickness R.C. lintel over and pack out with polystyrene off-cuts. 400mm diameter waste pipes from sinks, washdown room and any other room as required. 32mm diameter from basins and 100mm from W.C.s. All traps to be 75mm deep seal. Any waste exceeding 1.7m in length to have anti-siphonic traps. Any waste exceeding 2.5m in length to be 50mm diameter. All waste pipework to BS 8000.

## ELECTRICAL SAFETY

The amount of light fitting/sociates/switches etc. is to be agreed between the client and the contractor before work commences on site. All wiring and electrical work will be designed, installed, inspected and tested in accordance with the requirements of BS:671-2006, the IEE 17th edition wiring guidance and building regulation part P (Electrical safety) by a competent person registered with a electrical self certification body authorised by the secretary of state. The competent person is to send the local authority a self-certification certificate within 30days of completion of the electrical works. The client is to be provided with a copy of the self-certification certificate and a BS:7671 electrical installation test certificate.

## LIGHTING EFFICIENCY

At least 1/40 of all new light fittings which are to be installed will be capable of taking lamps having a luminous efficiency greater than 40 lumens per watt e.g. fluorescent and compact fluorescent lighting fittings meet this requirement. All external lighting to have lamps that do not exceed 150 watts and switch off when there is enough daylight and when not required at night.

DWG N° 5

Client Name

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No.	Revised/Date

Revised/Date