

**SPECIFICATION AND MATERIALS**

**DRAINAGE**

**DRAINAGE ABOVE GROUND**  
Single stack plumbing system installed in accordance with BS 5571 - 1971. 100mm dia. Plastic soil and vent pipes connected to ridge vent terminal or air admittance valves.  
Baths wastes 32mm dia. for lengths not exceeding 1.7m and 38mm where length exceeds 1.7m. Bath, shower and sink wastes to be 38mm dia. W.C. wastes to be 100mm dia. - all waste pipes to be fixed with 75mm deep seal traps and rodding access as necessary. Where shower wastes exceed 3.0m in length size to be increased to 50mm dia.  
Large radius bend and rodding access pipe to be fitted at base of each soil stack.

**DRAINAGE BELOW GROUND**

All new drainage to BS 8301.  
Carefully locate all existing drains prior to commencement of the works. Grab up existing redundant gutters and seal off redundant drains in concrete. Excavate and form new manhole chambers on 150mm concrete slab, laid on new concrete and X sprayed backfill and trenching (wherever) smooth.  
Build up 225mm class 1 engineering brickwork sides and set in cast in situ concrete and 6mm Chamber 400mm x 750mm if invert level 1000mm  
Chamber 1300mm x 750mm if invert level 1000mm  
Step zone at 300mm cover  
Precast concrete and PVC chambers to be used with Local Authority Approval.  
Drains to be formed using 100mm dia 'Supersew' or similar pipes with flexible polypropylene couplings laid on and supported with poly slating. Drainage below the building are to be stenciled and backfilled with concrete. Flexible rubber joints to be provided to drains 150mm each side where passing through foundation walls and precast concrete liners to be built in over drainage and service openings.

**FOUNDATIONS**

All to structural engineers details.

**FLOORS**

Ground floor to be R.C. slab to structural engineers details on 150mm thick wall considered loadings based with height.  
120g polythene damp proof membrane laid over floor slab with minimum laps of 300mm and topped with 40mm thick Celotex GA2048 rigid slab insulator covered with polythene DPM lapped as before and finished with 65mm thick screed with mesh reinforcement.  
Damp proof membrane to extend up walls, partitions and vertical abutments. And lapped with DPC all round.

**WALLS**

External walls to be constructed in 265mm cavity construction with 100mm facing brick to outer leaf. 65mm wide cavity seal together with stainless steel wall ties at centres to be agreed with the structural engineer. Cavity to be fully filled with 55mm 'Techcrete' wall bats. Inner skin of cavity to be 100mm rendering blockwork. Structural strength of blockwork to be specified by structural engineer. Cavity to be closed at reveals and joints with laminated cavity clear built in as recommended by manufacturer.  
Existing external walls to be lined internally with 10mm thick 'Celotex' leaf-R boards reference GA3042 to achieve a minimum U' value of 0.17W/m<sup>2</sup>K.  
Fix 25mm x 20mm treated softwood battens to insulation board to provide fixing for wall boards. Ensure that positions of battens coincide with lining board joints. Line window and door reveals with GA30122 to reduce risk of thermal bridging.

Internal dividing walls between bedrooms to be constructed from 'Oxypro' or similar approved sound proof partition.  
Sound partitioning to be fixed with 'Lafarge' perlite boards or 'Oxypro' double boards.  
Fixed in accordance with manufacturer's instructions. Board to have taped and filled joints to receive finishes. Void between boards to be filled with 100mm quilt insulation.

Internal walls within rooms and studies to be constructed from 'Oxypro' or similar approved sound proof partition.  
Sound partitioning to be fixed with 'Lafarge' perlite boards or 'Oxypro' double boards.  
Fixed in accordance with manufacturer's instructions. Board to have taped and filled joints to receive finishes. Void between boards to be filled with 100mm quilt insulation.

Lift enclosure to be constructed from 200mm cavity construction with 100mm outer leaf of dense concrete blockwork. 50mm wide cavity seal together with stainless steel wall ties at centres to be agreed with the structural engineer.  
Cavity to be fully filled with 50mm 'bat' or similar insulation. Inner skin of cavity to be 140mm dense concrete blockwork structural strength of blockwork to be specified by structural engineer.

**KITCHEN AND BATHROOM VENTILATION**

Mechanical ventilation to be provided to kitchen in accordance with current Building Regulations. Extraction rate to kitchen to be 30 litres / sec provided by an extraction cooker hood or 60 litres / sec by an extractor fan unit. Extraction rates to each bathroom to be provided by 'Vilvent' ventilation system installed in accordance with manufacturer's details and specification, designed in accordance with BRE digest 394, 'Continuous Means of Ventilation in Buildings'.

**WINDOWS / DOORS**

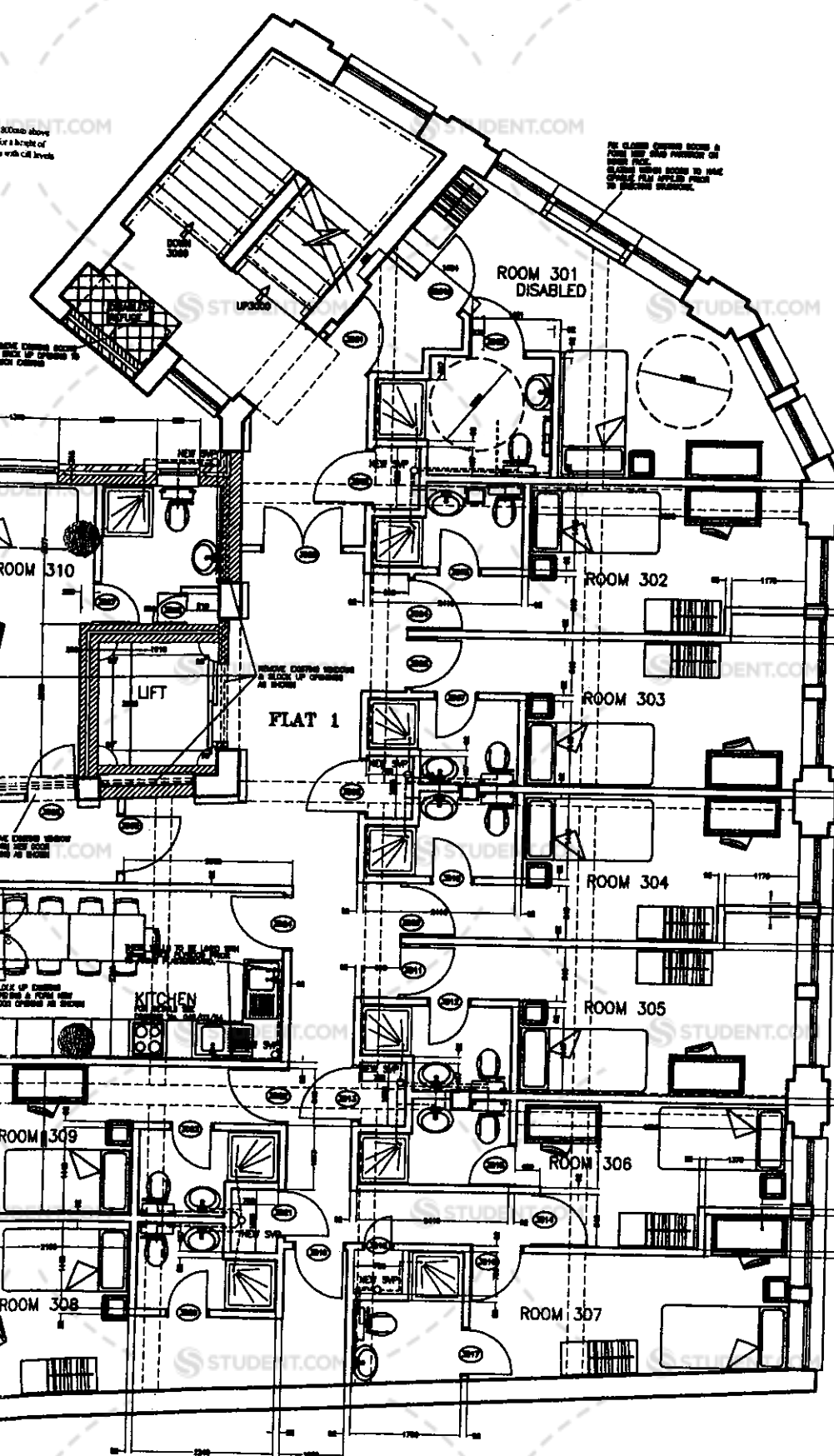
All windows as indicated on drawings to have a minimum of 1/20 area openable to all rooms, total window area to each room to be less than 1/10 of floor area.  
New windows fixed by galvanised lag set into brick / blockwork between cells to be fixed in place.  
External doors with hardwood threshold and weather. Bad threshold on dip and run waste in reveals.  
Safety glazing to be installed in critical areas inside building. These areas are as follows:-  
In doors and door side lights between finished floor level and 1500mm high in internal and external walls and partitions between finish floor and 800mm high  
NOTE - all safety glazing to comply with BS 6206

**SAFETY GLASS**

Safety glass is to be fitted to all opening doors and all windows, any part of which is below 800mm above floor level. Glazing to doors and windows adjacent to doors to be safety glass to BS 6206 for a height of 1500mm above floor level. Toughened or laminated glass to be fitted to first floor windows with sill levels below 800mm above floor level.

**ROOF CONSTRUCTION**

Existing roof covering to be stripped back to roof deck.  
Prepare deck and apply mastic asphalt in two coats to a total depth of 20mm on black sheathing felt to BS 747.  
Asphalt to be finished with solar reflective paint.  
New roof covering to be laid to existing falls on 125mm 'Celotex Double-R' RG 2085 or similar approved thermal insulation.  
Install 150mm x 50mm x 20mm softwood batten to perimeter of roof and dress with mastic asphalt on expanded metal lath.  
Code 4 lead counter flashing to be chased into perimeter parapet wall and dressed down over new lath.  
All leadwork to be in accordance with lead producers specifications.



**PROPOSED THIRD FLOOR PLAN**