GENERAL SPECIFICATION

FOUNDATION
Wall to have 1:6 mass concrete foundation 1000mm deep x 600mm wide. Final foundation depth to be checked by Building Inspector on site. In addition foundation to be taken minimum 600mm below any tree roots encountered. Any existing drains under proposal to be encased as directed by L.A's Building Control Inspector. Use stainless steel furfix profile where new concrete butts with the existing.

SOLID GROUND FLOOR.
75mm sand/cement screed (3:1 mix) with mesh reinforcement on 100mm thick concrete overcite on 1200 gauge polythene DPM on 50mm sand blinding on 150mm well compacted hardcore on 60mm thick Celotex Ref GA2060 insulation floor board. Existing sub-floor ventilation to be maintained by providing 75mm Ø duct under new floor 225x75 air brick in external wall. New DPM to be lapped to new and existing DPC's and DPM's.

. EXTERNAL CAVITY WALL
12mm brick external skin, 75mm cavity filled with 75mm "Drilltherm" cavity batts and innerskin of 100mm thermalite/Celcon or similar blocks (1/1/6 mortar). Insert galvanised wall ties at 450mm centres vertically, 00mm horizontally and 300mm vertically around openings. Wall to be bonded to existing structure with furfix stainless steel channels in accordance with manufacturers instruction. Cavity to be filled with weak concrete to within 150mm DPC level and to be closed at roof level with 2 layer of creasing tiles bedded with cement mortar. Wall to be plastered internally with carlite plaster.

. DAMP PROOF COURSE.
Hyload or similar DPC at reveals to all opening and floor level a minimum of 150mm above external level and lapped into existing. Damp proof membrain to be continuous with the existing and new DPC in walls. Polythene sheeting, as DPM, of at least 1200 gauge laid with joints sealed on a bed of material which will not damage it eg sand blinding on hardcore.

. SANITARY PIPEWORK AND DRAINAGE.
Soil and vent pipe to finish at least 900mm above any opening into the building within 3000mm from it.
Wash hand basin, bath and shower tray and kitchen sink to be fitted with minimum of 75mm deep seal trap.
Provide rodding eyes to all drainage above ground at change of direction.
Shower tray to be placed on a raised plinth to provide access to the trap.
New manhole to be constructed on 225mm semi-engineering bricks on 150mm thick concrete base.
New drains to be UPVC pipes laid to fall 1:40 and be surrounded with 150mm lean mix concrete.
Any pipes passing through foundation/wall to be protected by R.C. lintels.

6. VENTILATION.
Each habitable room to have a window or windows of 1/10th of the floor area as day light.
New habitable rooms to have a window or windows with an opening area of 1/20th of the floor area together with 8000sq.mm of background ventilation.
Mechanical extractor fan to be provided in the kitchen, discharging to external air, of not less than 30L/s when incorporated in the cooker hood, or 60L/s else where. Kitchen to have background ventilation of 4000sq.mm.
Mechanical extractor fan to be provided in bathroom/shower room of less than 15L/s rating discharging to the external air.
Internal bathroom/shower room and WC compartment should be fitted with mechanical extractor of not less than 15L/s rating, connected to light switch, and must have a 15 minute overrun and there must be a provision for air replacement.

7. LATERAL RESTRAINT.
Where wall runs parallel with roof, floor and/or ceiling joist 30x5mm galvanised M.S. straps to be provided at 1.8 centres built into wall and taken over 3no joist with solid bridging under. Wall plate to be strapped to wall with 30x5mm galvanised batstraps. Herringbone strutting or staggered solid strutting to be provided to floor and ceiling joist at mid span.

8. FLASHING / LINTEL
All flashing to be code 4, 150mm high chased into existing wall and fixed with lead wedges.
Provide Catnic CN8 lintel with insulation and 150mm end bearing.

9.

Racking to dormer
Use 150 x 50mm timber secured to rafters and timber beams over window in dormer. Use as appropriate horizontal tbisers but no more than at 400mm centres. Clad externally racking using 15mm ply. Finish using sarking felt, 25 x 38mm battens and re-used plain concrete tiles minimum headlap 100mm. Insert 100mm rockwool insulation into racking using tight fitting rockwool batts secured using round wire nails. The dormer roof joists to be 200x50mm C16 at 400mm centres.

Existing rafters
Secure 50 x 25mm timber battens to existing 100x 50mm rafters using glue and no. 10, 30mm screws at 50mm centres.
Double up rafters either side of dormer opening and either side of roof windows. Use M12 bolts and dog toothed washer at 450mm centres to doubled up rafters. Cross bracing below ridge level using 150 x 50mm timbers secured using M12 bolts and dog toothed washers to rafters. Timber uprights secured to rafters using M12 bolt and dog toothed washer.

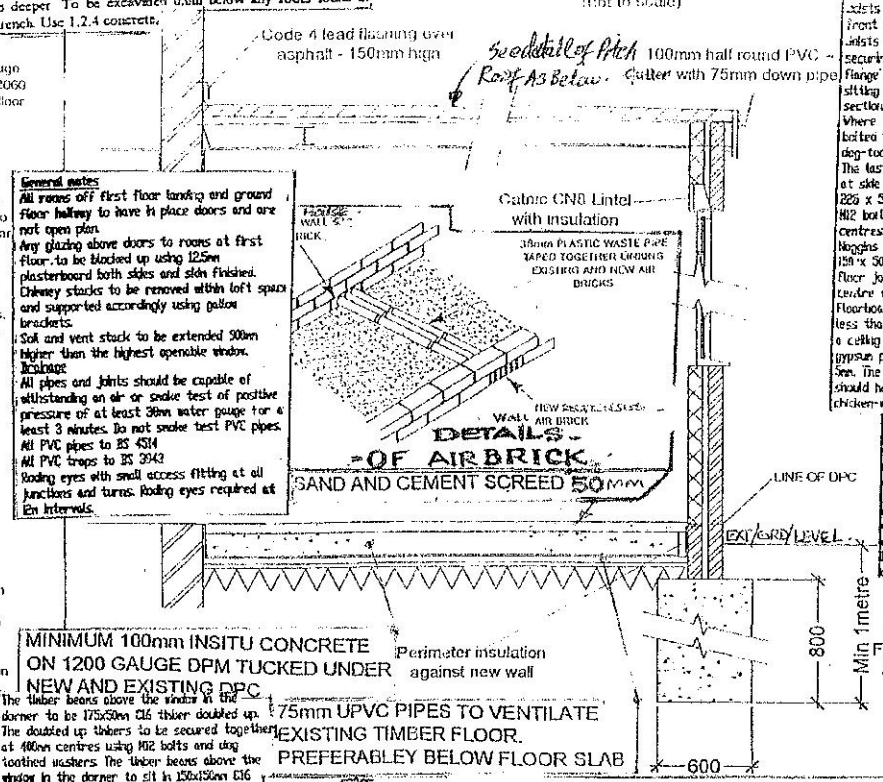
10. GLAZING
All new glazing to doors, windows, roof lights etc. to be 16mm Argon fill cavity with low E-coating glazing. All new doors and windows are to have double glazed sealed units. All doors and patio doors and any side lights to have laminated or toughened safety glass. Any window within 800mm of the finished floor level to have laminated or toughened glass.

11. RAINWATER
Provide 100mmØ UPVC ½ round guttering with 75mm Ø UPVC downpipe discharging to roddable backinlet gulley or a suitable trap and connected to existing surface water system if found on site.
Final arrangment to be agreed by L.A. surveyor.

Electrical, mechanical, heating and finishing works are to be as specified by the client. All materials and workmanship to be to the latest British Standards and to manufacturers recommendations.
It will be the clients responsibility to secure any Party Wall matters, Rights to access to adjoining property or land in order to carry out the nescessary works and any other legal matters that may arise in order to execute the works directly or indirectly.

(1) **FOUNDATIONS:** To be a minimum of 1.2m below lowest ground level or to level of adjacent drains, whichever is deeper. To be excavated 0.6m below any roots found in trench. Use 1.2.4 concrete.

SECTION DETAIL OF EXTENSION
(not to scale)



General notes
All rooms off first floor landing and ground floor hallway to have in place doors and are not open plan.
Any glazing above doors to rooms at first floor to be blocked up using 12.5mm plasterboard both sides and skim finished.
Chimney stacks to be removed within loft space and supported accordingly using gallow brackets.
Soil and vent stack to be extended 900mm higher than the highest openable window.
Drainage
All pipes and joints should be capable of withstanding an air or smoke test of positive pressure of at least 38mm water gauge for a least 3 minutes. Do not smoke test PVC pipes.
All PVC pipes to BS 4514
All PVC traps to BS 3943
Rodding eyes with small access fitting at all junctions and turns. Rodding eyes required at 12m intervals.

MINIMUM 100mm INSITU CONCRETE ON 1200 GAUGE DPM TUCKED UNDER NEW AND EXISTING DPC

75mm UPVC PIPES TO VENTILATE EXISTING TIMBER FLOOR. PREFERABLY BELOW FLOOR SLAB

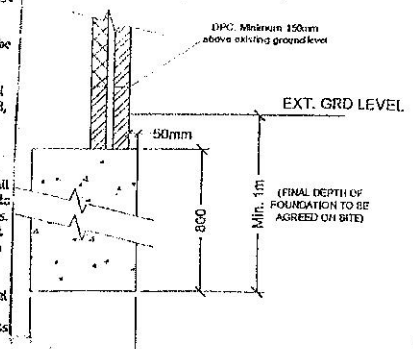
The timber beams above the window in the dormer to be 175x50mm C16 timber doubled up. The doubled up timbers to be secured together at 400mm centres using M12 bolts and dog toothed washers. The timber beams above the window in the dormer to sit in 150x150mm C16 posts either side.
Dormer cheeks to be fitted with code 3 lead soakers and code 4 lead flashing.

NOTES

Floor Joists
Use 225 x 50mm C24 timber joists for new timber floor.
Joists to span from front to back sitting on front steel, centre wall and rear steel.
Joists to be secured to steel beams by securing 100x50mm timber section to lattice flange using M12 bolts and the new floor joist sitting inside web and on top of 100x50mm section.
Where joists overlap centre wall, joists to be bolted together using two M12 bolts and dog-toothed washers.
The last floor joist which sits on centre wall at side of staircase to be tripled up using 3, 225 x 50mm C24 joists bolted together using M12 bolts and dog toothed washers at 400mm centres.
Noggins at centre span of floor joists using 150 x 50mm timber. Around stairwell triple up all floor joists. Where floor joists run parallel to centre wall use timber to timber joist hangers.
Floorboards to be tongue and grooved of not less than 19mm thickness on timber joists with a ceiling of 12.5mm plasterboard finished with gypsum plaster having a minimum thickness of 5mm. The new floor joists at second floor level should have 65mm mineral wool laid on chicken-wire mesh secured to new floor joists.

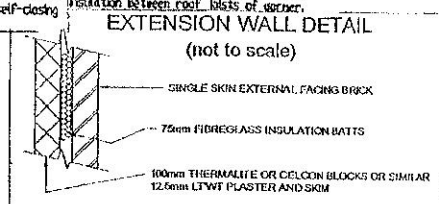
Smoke Detectors
Install linked mains powered battery back up smoke detectors with sounders at ground floor hallway, first floor landing and second floor landing, wired to the light circuit.
Doors
All doors to existing property to have self closing door devices fitted.
Any proposed new doors to be fitted should be 1/2 hour fire resisting doors with self-closing door devices.

ECCENTRIC FOUNDATION ON BOUNDARY LINE
(not to scale)



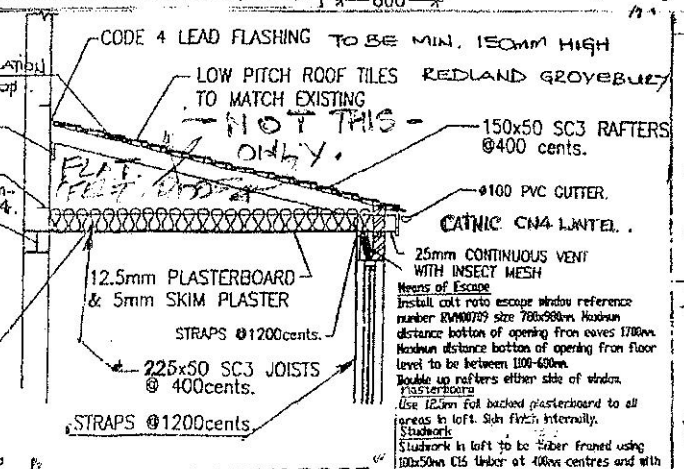
600
Insulation
Use 100mm glass fibre insulation laid between rafters. Where timber uprights are to be, insulated use two layers of 65mm roll batts which should be tight fitting and held in place by wire round nails. Use 100mm glass fibre insulation between roof joists of corner.

EXTENSION WALL DETAIL
(not to scale)



(S4 of S4)

TILE VENTS FOR CROSS-VENTILATION MANUFACTURER REQUIREMENT



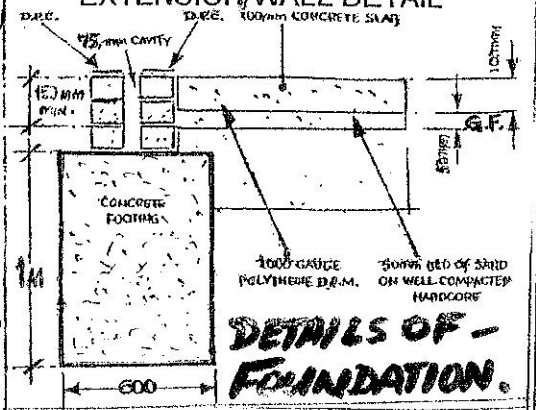
Roof Windows
Install to manufactures instructions. Double up rafters either side of roof window.
Existing First Floor Ceilings
Check that existing first floor ceilings are constructed using 12.5mm plasterboard. If it is not the case install 12.5mm plasterboard over the existing ceiling and plaster skim finish.
150 mm QUILT INSULATION BETWEEN JOISTS

NOTES
Staircase
All steps to have the same rise and going.
Maximum riser 220mm
Minimum going 220mm
Maximum pitch 42 degrees
Six hundred 600mm above the pitch line or floor
Minimum clearance 2000mm to new and existing staircase.
Hand rail to staircase should be such that it is 900mm above pitch line of stairs.
Any open balusters to have vertical guarding rails at 100mm centres so that a 100mm sphere will not pass.
The height of the guarding around stairwell to be 900mm.
STANDARD DETAIL DRAWING

DETAILS OF PITCH ROOF
NOT TO SCALE

"NOT TO SCALE"

EXTENSION/CAVITY WALL DETAIL



DETAILS OF - FOUNDATION.

All dimensions must be checked on site and not stated drawing unless otherwise stated and must be verified by the Builder.
All works to be carried out in a good workman-like manner in full compliance with 1992 Building Regulations and to all current code of practice of British Standards.
All work to be carried out to L.A's Satisfaction and to latest Code of Practice.
Contractor to ensure that no part of structure to encrough on other property or properties.

Studwork
Studwork in loft to be timber framed using 100x50mm C16 timber at 400mm centres and with noggins at midspan. Both sides to be finished in 12.5mm plasterboard and skim finished. Insert 65mm rockwool insulation batts in-between plasterboard. Where stud work runs in same direction as floor joists double up floor joist and secure both floor members with M12 bolts and dog toothed washers at 400mm centres.
Finishes to party walls Secure 100x50mm C16 timber to party walls at 400mm centres. Insert in between timber, compressed strawboards minimum thickness 50mm to provide sound insulation. Secure two layers of 12.5mm plasterboard to timber framing and skim finish.

DRAW-IT (PLANNER) ARCHITECT / CONSULTANT. (M) 07949035745.	COUNCIL REF:-#	SCALE AS SHOWN	PROPOSAL :- SINGLE - STOREY EXTENSION TO DETACHED GARDEN - OUTBUILDING FOR USE AS GYM/	(OWNER). MR.
	REVISED DATE	PLANNING PORTAL REF:-# PP-		ADD.- H / 14'
	DWG# -		DWG# - S/14-H/1	MIDDX; LONDON
	DATE -	SCALE AS SHOW	DATE:	