

2008 Case Study - HOLLYFIELD AVENUE

GENERAL NOTES

These drawings & notes are to be read in conjunction with structural engineers drawings & calculations & carried out to LA approval with regular DS inspections. All work to comply with current Codes of Practice & British Standards & NHBC where required.

Workmanship: All workmanship & building methods are to be carried out in accordance with BS 8000. Allow for cleaning the works thoroughly inside & out at completion and touching up minor faults & blemishes.

Dimensions: All site particulars, dimensions, levels, size of existing structure & position & depth of existing drainage are to be checked with the drawings & any discrepancies to be reported before work commences. The contractor is to check all setting out dimensions & levels before work commences. Where setting out is indicated as taken from or across existing structures, it is the contractors responsibility to check & ensure that new components fit the existing dimensions.

CDM: The main contractor is responsible for complying with CDM Regulations where applicable.

Dormer:

Dormer Flat roof:

3 Layer built up felt roofing, 18mm WBP, Breatable membrane, 150 x 50mm rafter, 50mm ventilation gap and 100mm rigid insulation between rafters with 50mm Gyproc Thermalboard super on underside of rafters with plasterboard+skim finish. U value 0.2

Dormer Cheeks:

Slate tiles, 25x38mm battens, 18mm WBP, Breathable membrane, 50mm ventilation gap and 100mm rigid insulation between rafters with 50mm Gyproc Thermalboard super on underside of rafters with plasterboard+skim finish. U value 0.2

Loft:

Loft Floor

Floor finish on 18mm T&g floor board on 200 x 50mm timber joist at 450 c/c with 100mm mineral insulation in between and 1 layer of plasterboard ceiling on underside of ceiling

Loft low Wall

100mm timber stud with 100mm Glass fibre slab between stud. Finish with 1 layer of plasterboard U value: 0.35

Sloping Roof

All new sloping roof to be Slate tiles, 25x38mm battens, 18mm WBP, Breathable membrane, 50mm ventilation gap and 100mm rigid insulation between rafters with 50mm Gyproc Thermalboard super on underside of rafters with plasterboard+skim finish. U value 0.2

Glazing: Double Glazed windows to all new extension. To be min 25mm o/a, with argon filled gap to give a U-value fo 2.0 max. Frames to be UPVC. Inner pane to be low e coated.

Timber preservation: All timber exposed or built into walls to be treated with wood preservative in accordance with BS5268 part 5 1977. All roof timbers to be VAC-VAC treated.

Ground bearing floors: Allow for 75mm reinforced screed on 75mm extruded polystyrene insulation laid over 1000 visqueen DPM over slab to structural engineer's details.

Slab to be laid over sand blinding and min. 100mm well consolidated hardcore.

External Wall: New double storey extension to have 2 Layers of 100mm standard blockwork with 75mm cavity inside with 12.5mm plasterboard finished with skim & emulsion. DPM to be laid at 150mm above ground level. Engineering brick between DPC and Footing

Structural Metal Beam: All structural metal work to be finished with 2 layer of plasterboard in accordance with BS476. All metal beam to be 203 x 203 x 46kg UB and chased into solid wall on new pad stone of at least 150mm lap on each side

Foundation

New foundation around double storey side extension to be 600mm wide x 1000mm deep concrete footing.

Ground Floor Construction

New extension suspended timber floor : Floor finish on 18mm T&g floor board
Breathable membrane, 200 x 50mm timber joist at 450 c/c with 200mm mineral insulation in between . U value 0.25. Joist to be laid minimum 150mm from ground level. Provide vent brick at every meter interval.

Lintels: All new lintels to be Cavity wall Catnic lintels to manuf. specs.

BUILDING REGULATION NOTES

- A. Structure:
 - a. Structural design calculations & details as Engineer's drawings.

- B. Fire Safety:
 - a. All lobby walls to have 30min fire resistance & all habitable doors openings to be FD30 self closing with intumescent seal. Ceilings to be min 30 min f.r
 - b. Smoke alarms fitted in circulation spaces and all stair landings, with mains powered with battery back up, one per storey, ceiling mounted min 300mm from walls & light fittings. Kitchen to be fitted with heat detector.

- F. Ventilation
 - a. Each habitable room to have 8000mm² trickle ventilation through proprietary window fittings.
 - b. Mechanical extract: kitchen min 60 litres/sec, bathroom 15 litres/sec, WC 6 litres/sec all with 15 min overrun.
 - c. Rapid ventilation; Opening area of windows to be min 1/20th of floor area of room.

- G. Hygiene
 - a. Supply new condensing boilers to supply hot water and heating. Hot water storage to be by means of pressurised cylinder of sufficient capacity to cope with the maximum demand expected of the number of fittings specified. See layouts for bath, shower, w.c, and wash basin provision.

- H. Drainage & Waste Disposal
 - a. Drains to be 100mm dia. below ground, upvc drainage system laid to min 1:40 fall bedded & surrounded in min 150mm pea shingle. Where drains pass under walls take foundations below invert level & provide rocker pipes & support wall over with precast lintels. All underground system to be flexible jointed in accordance with BS.8301. Common waste branches to have anti-syphonage valves where necessary. Wastes to be connected to new 100mm dia. upvc soil & vent pipe to comply with BS.5572 1978. No connection to be made within 200mm below centre line of WC connection. SVP to terminate 900mm above openable windows within 3m horizontal distance & fitted with wire/plastic cowl or taken to proprietary ridge ventilator. Stub stack to be terminated 450mm above highest flood level with air admittance valve min 50mm above highest flood level. All gullies to be back inlet gullies.
 - b. Manhole construction: where depth to invert is less than 910mm provide upvc inspection chambers installed in strict accordance with manufacturers details. Where greater than 910mm, manholes to be 1200x750mm precast concrete chamber sections on min 100mm concrete base with benching to channel falling at min 1:12. If deeper than 1.5m then steps are required. Fit cast iron frame & cover to comply to BS497. Any manholes & gullies located within buildings to be fitted with double seal bolt down airtight covers.

- c. Waste drainage: Sanitary pipework to comply with BS5572 1978. Waste sizes; sink 40mm dia, handbasin 32mm dia, WC pan 100mm dia, showers 40mm, baths 40mm. Wastes to be connected to new 100mm upvc soil & vent. All wastes fitted with 75mm deep seal traps & to have rodding eyes at every change of direction.

- L. Conservation of Fuel & Power (L1 Dwellings)
 - a. Heating & hot water controls; hot water thermostats, thermostatic radiator valves to each bedroom and bathroom, thermostats to living areas.
 - b. min 1 in 3 light fittings only capable of energy efficient lamps.
 - c. New double glazed window on loft and extension
 - d. Commissioning certificates for hot water & space heating system to be provided. Maintenance instruction & operating manual to be provided to occupiers and landlord.

- M. Access & Facilities for Disabled People
 - a. New socket outlets & light switches to be at height between 450mm - 1200mm above FFL.

- N. Glazing
 - a. All glazing in critical locations ie. doors & partitions adjacent to doors below 1.5m or any glazing below 800mm to be impact resistant. (toughened or laminated glass)
 - b. All new windows to be changed to double glazed windows.

- P. Electrical Installation
 - a. Allow for main light fittings in new extension to have a luminous efficiency of 40 lumens per circuit watt.
 - b. Electrical installation to comply with BS7671. The IEE 16th edition wiring guidance and Buidling.
 - c. Regs Part P. On completion provide to client and LA installation test certificate compliant with BS7671
 - d. Smoke Alarms to be mains operated + to conform to BS 5446 fitted to L2 system as descibed in BS 5839 part 1 1988. Position a detector in B3, G1, 1.1 and 2.1 all to be link