# Proposed two storey rear extension at 8 Adkin royd Silkstone Barnsley S64 4LA

**Plans scale 1:100 1:50**

All dimensions and levels to be checked and verified on site. Any discrepancies to be reported before work commences. The project to which this drawing applies should, if applicable, be undertaken in full compliance with the CDM Regulations (1995), and under the control of a client appointed Planning Supervisor.

600mm x 225mm concrete foundations minimum 0.9m deep in clay and if within 1 metre of drains to be taken down to invert level and all foundations to the satisfaction of District Building Surveyor. 450mm x 225mm concrete foundations below internal load bearing walls with minimum 450mm frost cover.

**All timbers** are to be class C16 unless otherwise stated to BS5268-2, 2002 and graded at 20% moisture content. All timbers are to be transported and stored on site so as not to increase its moisture by 24%.Ground is to have all vegetable matter removed and replaced with a min of 150mm well compacted limestone hardcore with 100mm concrete screed.

**Timber ground and first floor** is to be 19mm t&g boards nailed to 150 x 50mm SW joists at 450mm c/c, ground floor to have minimum 150mm underfloor ventilation and 9"x6" airgrates & cavity linears at 1.8m c/c and 450mm from the corners, floor to have 100mm quilt insulation suspended on mesh for insulation, first floor 12.5mm plaster and skim to the underside with 100mm thick quilt 10Kg/m insulation between floor.

**TIMBER GENERALLY ALL FLOORS** fitted with 50 x 50mm herringbone strutting at mid span. All joists are to have a min end bearing of 90mm, on joist hangers or built into the wall and mastic sealed. Any notches to be no deeper than 0.125 times the depth of a joist and cut no closer than 0.07 to its end and no further than 0.25 times its span. Holes to be no greater than 0.25 times the depth of its joist, drilled at its centreline and be located between 0.25 and 0.4 times the span from the end. Joists will be doubled up under stud walls and baths. Sizes and spacings calculated in accordance with BS5268-7-1:1989.

**Walls below DPC** are to be 300mm wide, 7N blocks. Engineering bricks are to be used from just below ground level with cavity fill to ground level up to the DPC is fitted at least 150mm above ground level and linked to the existing DPC.

**EXTERNAL STONE** and block wall is matching 102.5mm thick 1200 kg/m$^3$ with 100mm thick 7N block, 600Kg 100mm rockwool cavity batts between, finished with 12.5mmplasterboard and 3mm skim finish, 5 stainless steel wall ties msq and at every block coarse at reveals. Insulation is to continue to reveals and fitted with DPC to heads jambs and cills of openings, insulations to be continuous with roof insulation. Minimum returns of 550mm, walls to be bonded into the existing with continuous cavities or use wall extension profiles bolted and tied to walls with surface brick cut to prevent water penetration.

**INTERNAL-NON-LOADBEARING**

Non-load bearing walls to be 75mm x 50mm timber stud with 100mm quilt insulation fitted between 12.5mm plasterboard and skim to both sides and double joists under walls where running parallel or a sleeper wall at ground level.

**CATNIC** galvanised steel to BS EN 10142:2000 and polyester resin coated to BS5977: Pt 2 1983 and insulated to 0.35W, size will depend on length and loading, see technical guide. Lintels to have 150mm end bearing, fitted level, bedded on mortar, point loads are not to be applied to lintel and are not to be cut.

**LATERAL ESTRAINT STRAPS** to be galvanised mild steel to BS5268 Pt 3, 30 x 5mm in section and at least 1.0m long, attached across at least 3 joists with noggins and packings between and fixed with at least 4 screws or nails 4mm diameter and at least 75mm long. First floors are to have straps fitted at max 2.0m c/c and in roofs at ceiling and verge level at 2.0m c/c, trusses are to have straps fitted at node points.

**JOIST HANGERS** generally to be 2.5mm thick galvanised mild steel to BS EN 10327:2004 and B.s.6178 at same centres as joists, be fitted tight to walls and seated evenly. Joists to be cut accurately to length and securely nailed to the hanger, the floor is not to be loaded until the mortar joints are cured. Use SFH type in masonry walls and JHM type on timber, on steel beams hangers can be shot fired in place.

**CALCULATIONS** for trusses to be submitted to the local authority for approval as supplied by the manufacturer prior to commencement on site, trusses are to be vacuum pressure impregnated with preservatives and designed to BS5268 Pt 2 1988 and to be fitted at max 600mm c/c on truss clips nailed to 100x50mm wallplates which are to be strapped down every 1.8m with 5x30mm M/S anchor straps 1.0m long, floor to ceiling height not to exceed 2.4m.

**WIND BRACING** to be to BS5268 Pt 3 1985 and is to incorporate, 97 x 22mm diagonal bracing from the gable ridge to the wallplate at 45degres, 100x25mm binders at the node points, 100x25mm diagonal ceiling bracing and 100x 25mm web bracing taken over every three joists, every truss twice nailed with 100mm rounds, braces are to be lapped over at least two trusses at joints.

**TRADITIONAL** 100x50mm rafters with 100mm ceiling joists at 450mm c/c. Birds mouthed rafters are not to exceed one third of the rafter depth, workmanship to BS 5268-2. Gable to be finished in matching bargeboards to fascias and soffits or mortared to form a dry verge. Roof tiles to be concrete interlocking roof tiles nailed on 38x19mm tile battens on a layer of breathable roof felt nailed onto the rafters. Flashings to be code 4 lead and have 150mm upstands, jointed into brickwork courses, facia and soffits are 200x19mm SW nailed to ends of joists with 6mm soffits nailed to underside, gutters and fall pipes to be 100mm half round clipped at 1.2m c/c and 75mm diameter fall pipe. Roof void insulation is to be 160mm of quilt laid between the ceiling joists and 100mm of quilt laid at 90 degrees over the joists, ceiling to be 12.5mm plasterboard and skim finish.

**UPVC** window frames are to BE "A" rated and to the owner style and satisfaction with a drained glazing system, frame being 20% of the floor area, located within 0.8m-1.0m of the floor, frames fitted with 8,000mmtrickle vents. Frames to be fitted overlapping the cavity by at least 25mm and inconspicuously sealed with foam to the cavity, the frame is also to have an inner and outer flexible seal to the surrounding joints. Double glazed units are to be dual sealed factory fitted kite marked to BS.5713 with 20mm spacer bars with a soft low E coating to the inner pane, units to be fitted with rubber seals in the frames to achieve a U value of 1.3wmc. The sash is to have an opening light of at least 5% of the floor area and fitted with a suitable hinge for its size weight and cleaning, fitted with 3mm spacing blocks under the units, frames to be fitted with draught strips. No opening lights to be located higher than 1.3m of the floor level. All first floor habitable rooms are to have opening lights to exceed 0.33m and be at least 450mmx750mm in size. Safety glass to BS6206:1981, is to be located within 800mm of the floor in a window and 1.5m in a door and within 300mm to side panels.

HEATING SYSTEM is to be extended into the extension and radiators are to have TRV's fitted.

GENERALY all drainage is to be 100mm "Hepsleve" pipes or similar approved with flexible joints, bedded and surrounded in granular material and laid to a minimum fall 1:40. Any drains passing under buildings to be encased in minimum 150mm concrete and to be bridged where passing through walls. Inspection chambers to be 225mm Class 'B' Engineering brick or pre-cast concrete sections on 150mm concrete base, and chambers deeper than 1 metre are to have step-irons incorporated and internal sizes of chambers to comply with BS 8301. All drainage is to be to the satisfaction of and approval of the District Building Surveyor.

All rainwater pipes to approved soakaways minimum 4 metres from dwelling and an approved Percolation Test to be provided prior to surface water system being completed.

SMOKE DETECTORS are to be located as shown (SD) in corridors, circulation areas and escape routes no more than 3m from a bedroom, be securely fixed to the ceiling at least 300mm away from the wall. Detectors are to have mains wired interlinked system on the lighting circuit with battery backup.

ELECTRICAL WORK required to meet the requirements of Part P (Electrical Safety) 2005 Edition, Building Regulations must be designed, installed, inspected and tested by a person competent to do so. Prior to completion the Local Authority must be satisfied that Part P has been complied with. This will normally require that an appropriate BS 7671 Electrical Installation Certificate to be issued for the work by a person competent to do so.

INSIDE lamps are to be at least 40 lumens per circuit watt efficient and have 1 energy efficient light per 25m$^2$ or 1 per 4 fixed light fittings.