



EXISTING HOUSE AND EXTENSION TO BE RENDERED ABOVE D.P.C.

**DO NOT SCALE FROM DRAWINGS ALL MEASUREMENTS TO BE CHECKED ON SITE BY BUILDER AND CLIENT PRIOR TO COMMENCING WORK**

These drawings are intended for Planning Permission and Building Regulation Approval only. All works to be carried out in accordance with approved drawing only.  
 Where The Party Wall Etc Act 1996 applies, then a suitably qualified person shall be appointed.  
 All electrical work is to be undertaken by a competent person registered as part of the NICEIC Domestic Installers Scheme.  
 All sound testing is to be carried out by a UKAS Accredited acoustic engineer, a copy of any test results are to be forwarded to Local Authority Building Control.  
**COM 2015 will apply to this project - The Clients duties under the Regulations are transferred to the appointed Contractor. The Contractor should be familiar with the requirements of the Regulations and along with other required duties, provide the Client with a Construction Phase Plan for approval.**

**NOTES:**  
**DAMP PROOF COURSE**  
 Plastic D.P.C. to BS6575 a min. 150mm above finished ground level on outer leaf and level with floor on inner leaf. D.P.membrane to lap around back of inner leaf and under D.P.c. in walls. Cavity trays and vertical d.p.c. to BS6515 to be provided to all external openings.

**DRAINAGE**  
 Surface Water to be drained by existing guttering connected to existing drains.  
**EXTERNAL WALL CONSTRUCTION**  
 320mm cavity walls consisting of 20mm sand / cement render on 100mm 3.6 N/mm<sup>2</sup> Plasmor concrete block outer leaf, 10mm cavity, 90mm Kingspan Kooltherm K106 insulation board and 100mm 3.6 N/mm<sup>2</sup> Plasmor Fibrolite block inner leaf, to achieve a U-value of 0.18 W/m<sup>2</sup>K with 12.5mm plasterboard dot and dabbed onto blockwork with skim plaster finish. Stainless Steel Wall ties to be provided at 450mm crs. vertically and 750mm crs. horizontally (300mm crs. vertically within 150mm of openings) in accordance with DD140 Part 2:1987. Clear cavity to be maintained at least 225mm below d.p.c. with insulation starting at ground level. Brickwork below d.p.c. to be 300mm cavity walls in semi-egg bricks or concrete trench blocks.

New walls to tie to existing with galvanised wall starters or brickwork toothed into existing. All cavities to remain continuous with Thermabate 100 Cavity Closer or similar approved used at all window and door reveals.  
**FOUNDATIONS**  
 600 x 300mm thick C30/35 Reinforced strip foundations under 300mm cavity walls to be minimum of 1350mm (due to sewer) below external ground levels in accordance BS8004 and Part A of Building Regulations, loadbearing partitions to be as above except 450mm wide. A firm founding stratum should be reached and to the satisfaction of the inspecting LA building control officer. A393 mesh reinforcement to BS4483 with minimum 40mm cover to steel to be placed in bottom. There are no trees with 20m of the extension works, which would otherwise adversely affect the foundations/founding stratum. Foundations to be in accordance with NHBC guidance, Chapter 4.2 'Building Near Trees'.

**PITCHED ROOF CONSTRUCTION (Flat Ceiling)** to be Double Roman Concrete Tiles (colour to match existing) installed in accordance with BS5534 Code of Practice (Slating & Tiling for pitched roofs), perimeter tiles to have a min of 2 fixings with 100mm headlap on 25mm x 50mm s.w. battens on Permavent Breathable Membrane (BBA Certificate no. 064311) on pre-fabricated trussed rafters (Trussed rafters to be designed in accordance with BS 5298 Part 3:1985 Appendix A and to be braced horizontally and diagonally in accordance with manufacturers instruction. Roof manufacturers details / calculations to be supplied to Building Control Officer before commencement). Three number gable end rafters to be tied to wall at ceiling and rafter level with 1800mm x 30mm x 5mm m.s. galvanised anchor straps max. 2m crs. (solid packing and noggings required to include 100mm x 25mm s.w. longitudinal braces and 100mm x 25mm bracing to ceiling lies in outer of trusses. Wall plates to be 100mm x 50mm s.w. preservative treated. 300mm thick Crown Loft Roll 44 laid between and over ceiling joists and turned down at eaves, to achieve a U-value of 0.15 W/m<sup>2</sup>K. 12.5mm plasterboard and skim ceiling. Code 4 lead flashing and cavity tray with weep holes to junction of roof and wall.

**GROUND FLOOR CONSTRUCTION**  
 100mm thick concrete slab (mix 1 : 2 : 4) on 125mm Kingspan K103 insulation board on 1200G visqueen d.p.m. on min. 150mm blinded hardcore, to achieve a U-value of 0.18 W/m<sup>2</sup>K with 20mm Kingspan K103 insulation board lapped against external wall to prevent cold bridging.

**FIRST FLOOR CONSTRUCTION**  
 22mm T & G. boarding on 170x47mm C16 S.W. Joists at 400mm crs. built into inner leaf with solid timber block strutting minimum 38mm thick and three quarters joist depth at max. 2.4m crs. (boarding in bathroom to be water resistant with identification showing). Three number joists running parallel to outer wall to be tied in using 1800 x 30 x 5mm m.s. anchor straps at max. 2m crs. 100mm Mineral wool Insulation Quilt (Min. Density 10 Kg/M<sup>3</sup>) laid between joist. Ceiling to be 15mm plasterboard with plaster skim finish.

**LINTELS / BEAMS**  
 External openings in 300mm cavity walls up to 2700mm to be bridged with CATNIC CG90/100 lintels or similar approved. Beams to be surrounded with 12.5mm Gyproc Fireline plasterboard with two coats of skim finish (min. 3mm thick) to provide 30 mins. fire resistance.

**NON-LOADBEARING PARTITIONS**  
 75x50mm stud partitions with 15mm plasterboard (min. 10Kg/m<sup>2</sup>) with skim both sides built off double joists or sole plate, all stud work to be at 400mm crs. with 25mm thick mineral wool quilt with minimum (10Kg/m<sup>2</sup>) to be suspended between stud work.

**VENTILATION**  
 Bedrooms - one twentieth of the floor areas for rapid ventilation and 10000mm<sup>2</sup> per room for background ventilation, ie trickle vents.  
 Kitchen - Mechanical extractor capable of extracting at a rate of not less than 60 litres per second which may be operated intermittently and 4000mm<sup>2</sup> background ventilation, ie trickle vents.

**RADIATORS**  
 All new radiators to be fitted with thermostatic valves.

**RAINWATER GOODS**  
 75mm diameter p.v.c. downpipes with 100mm half round p.v.c. gutters on fascia brackets.

**DOORS**  
 External Doors to be double glazed U.P.V.C. frames. Double glazed units to consist of 4.4mm thick Pilkington optilam glass outer pane, 20mm air space 6.4mm thick Pilkington optilam therm glass inner pane to achieve a U value of 1.4 W/m<sup>2</sup>K or comply with DSER band C or better. All Internal doors to be 838mm wide to achieve minimum clear opening of 750mm. Any glazing within 1500mm of floor to have minimum 4.4mm toughened safety glass in accordance with BS6206.

**WINDOWS**  
 All windows to be double glazed U.P.V.C. frames with minimum opening vents greater than 1/20th of room floor area. Double glazed units to consist of 4.4mm thick Pilkington optilam clear glass outer pane, 20mm air space 4mm thick Pilkington optilam therm glass inner pane to achieve a U value of 1.4 W/m<sup>2</sup>K or comply with WER band B or better. All windows within 800mm from finished floor level and to all new doors / feature frames (300mm either side) within 1500mm from finished floor level to have 4.4mm Toughened safety glass. Escape Windows to Habitable Rooms to have minimum clear opening of 750mm high x 450mm wide and to have an area greater than 0.33m<sup>2</sup>. bottom of opening area to be not more than 1100mm above finished floor height, sash to be non lockable.

**ELECTRICAL INSTALLATION**  
 All electrical works / installations shall be carried out in strict accordance with the current I.E.E. regulations and Chapter 74 of B.S. 7671:2018 and in accordance of Part P of the Building Regulations. Electrical works should be inspected and tested in accordance with Section 712 of B.S.7671:2018 and Section 713 of B.S.7671:2018. Test Certificates to B.S.7671:2018 should be left with the user of the installation and a copy provided to the Building Control Officer. All new lighting and power outlets shall comply with B.S.3761 or B.S.1363. Electrical Consumer Units should be position so that the switches are 1350-1450mm above floor level.  
 All lighting and power outlets to be placed between 450mm and 1200mm from finished floor level. 75% of new light fitting to be energy efficient only taking energy efficient bulbs with a minimum luminous efficacy of 75 lumens per circuit-watt. (Location to be agreed with Client and Builder). External lights to have automatic control to switch lights off in daylight and automatic switch off when area is unoccupied. Mains operated interlinked smoke detectors with battery backup to BS5838-6 to be fitted within 3m of all bedrooms and 7.5m of all other habitable rooms (Location to be agreed with Client and Builder) with an installation and commissioning certificate. Main Operated Carbon Monoxide Detectors to BS EN 50291-1:2010+A1:2012 should be fitted to all rooms with open flue appliances with commissioning certificate.

**HAZARDS**  
 The following hazards must be addressed with regard to health & safety:  
 • Live services.  
 • Excavations.  
 • Handling major components.  
 • Working at height.  
 • Machinery & Equipment.  
 This list is not exhaustive, all hazards associated with building construction must be addressed & Risk Assessed specifically for this project. Any unforeseen Risk Element encountered to be reported to the Client.

All materials specified may be substituted with alternatives providing they meet an equivalent or better quality and standard. Any changes must be agreed with the client and L.A. Building Control Officer.

Rev.	Date	Description

**Project**  
 Proposed Two Storey Side Extension  
 for  
 Mr. L. Goodchild, 19 Opal Avnue, Chilton, Co. Durham. DL17 0QW  
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Title		Sheet 01	
A1 Scale	Drawn by	Date	Revision
1:50, 1:100	PA	Feb 2024	