

GL 10.050

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Section 1.0 - DEMOLITION
 Any demolition works are to be carried out in accordance with BS 6178:1982 Code of Practice for Demolition. Generally clear all rubbish, cut down trees and shrubs identified to be removed and grub up roots, strip vegetable soil from all areas and call away.

Clear all existing structures and materials identified as being removed to below ground level to such a depth as necessary for the new building and external works, whilst maintaining the integrity of the structures adjacent. Remove all redundant demolition materials from site. Grub up all obsolete drain/service runs & or manholes, cap off redundant connections and backfill with selected as dug material.

Note - retain and protect existing live drains/services serving the existing building.

Excavate to depths as follows and backfill with selected as dug material in and adjoining new foundations:
 - Soffit of foundation trenches
 In or adjoining new drain trenches - 100MM below bottom of drain trench
 Under parking surfaces - 450MM below FGL
 Elsewhere - 300 below FGL or to suit ground surface

Section 2.0 - FOUNDATIONS:
 2.1 Type, design and construction as subject to site conditions and in accordance with Consulting Engineer's recommendations and details as outlined in the site investigation report.

2.2 Concrete grading shall be a minimum C30 or as specified by the Consulting Engineer with any drainage runs bridged by introducing 3 No. T12 reinforcing bars over the aperture.

Where foundations are in close proximity to both hedgerows and trees, Protection shall be provided in accordance with NHBC 'Building Near Trees' supplement refer to section 2.11.

Section 3.0 - MASONRY - GENERAL
 Clay bricks throughout to be manufactured in accordance with BS 3921 concrete blocks throughout to be solid and manufactured in accordance with BS 6073 parts 1 & 2 and designated by the manufacturer as suitable for their intended location. Blockwork may be lightweight aggregate or aerated concrete provided that the specified structural, thermal and acoustic requirements are met. Alternative block densities to those specified may be acceptable subject to the proposed construction being supported by British Board of Agreement Certification. All masonry construction is to be built in accordance with BS 5628 Part 3. Mortar shall be of the mix proportions necessary to achieve adequate strength and durability in accordance with NHBC Standards Appendix 6.1 - D.

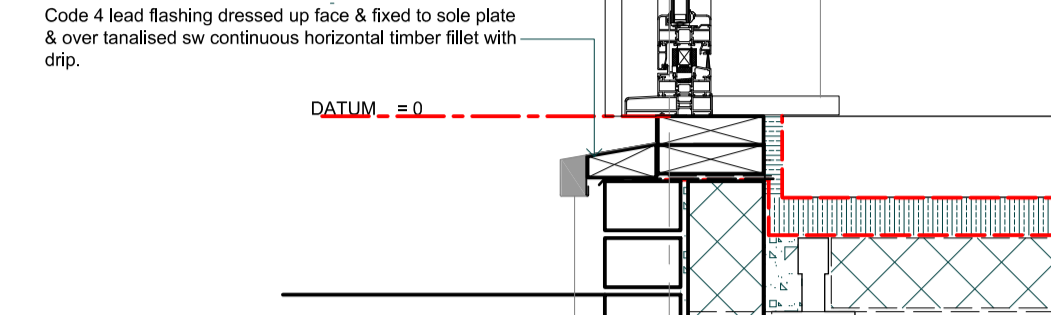
3.1 SUBSTRUCTURE BRICKWORK / BLOCKWORK
 Where necessary refer to the Structural Engineers design and details. The cavity to extend a minimum of 225mm below Dpc level. Walls below ground level may be Trench blocks or approved equivalent manufactured in accordance with BS6073: 1981, used in compliance with BS5628: Part 3, 1995 and supported by relevant Agreement Certificates. Facing brickwork to commence 2 No. courses below finished ground level. Holes to be left through walls for drainage entries and service entry positions as shown on drawings. 150mm deep x thickness of wall Recast concrete lintels over all openings in walls for drain & pipe duct runs where passing through walls. Refer to drainage layout for actual drainage entry positions.

3.2 Cavity work to be 100mm Brickwork outer leaf, cavity as above ground wall dimension & as noted on drawings filled with weak mix concrete to a level min 225mm below DPC with splayed 'top' towards outer face. 100/140mm blockwork inner cavity leaf. Mortar to be 1:4 frost resistant cement/sand mortar.
 Note: The outer leaf to have a minimum of one course below and two courses above finished ground level to be in frost resistant brick up to DPC level.

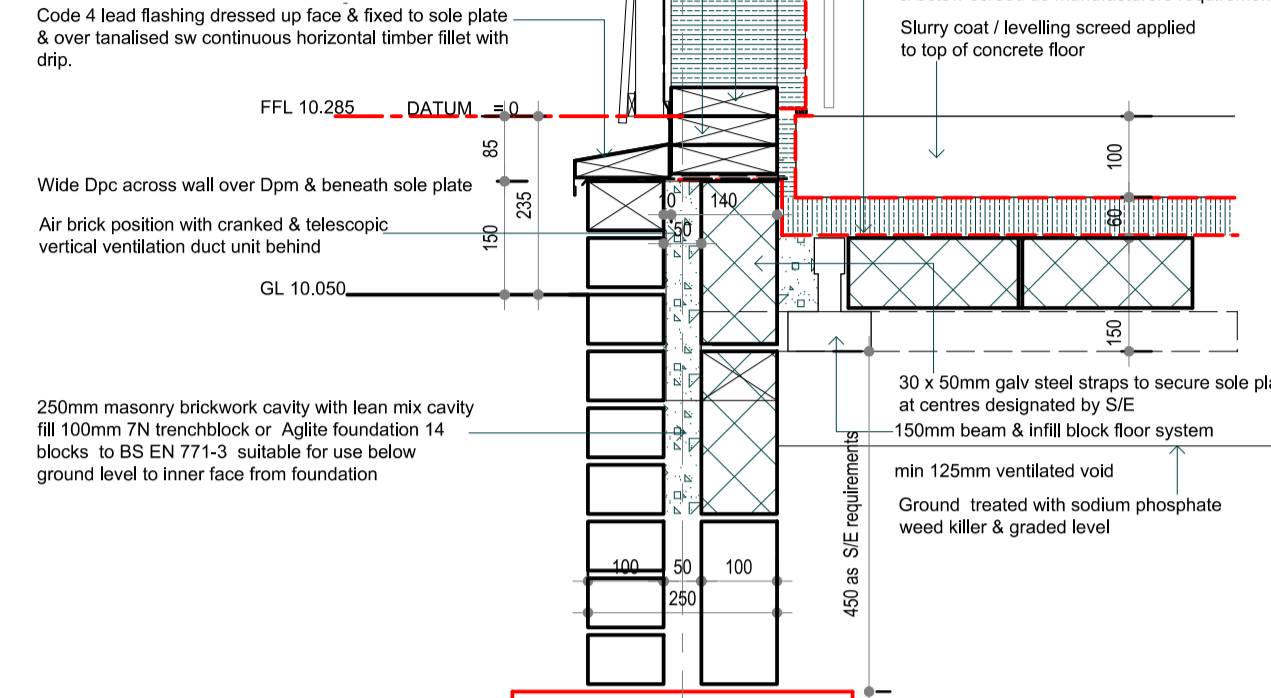
Provide weep holes to external brickwork skin either by open perpend or proprietary weep hole units spaced at max 900mm in brickwork below Dpc level, above splayed lean mix cavity fill.

3.3 Where more than modest levels of sulphates are present within the soil the guidance of BRE Digest 363 Sulphate and acid resistance of concrete in the ground gives guidance on the specification for such conditions.

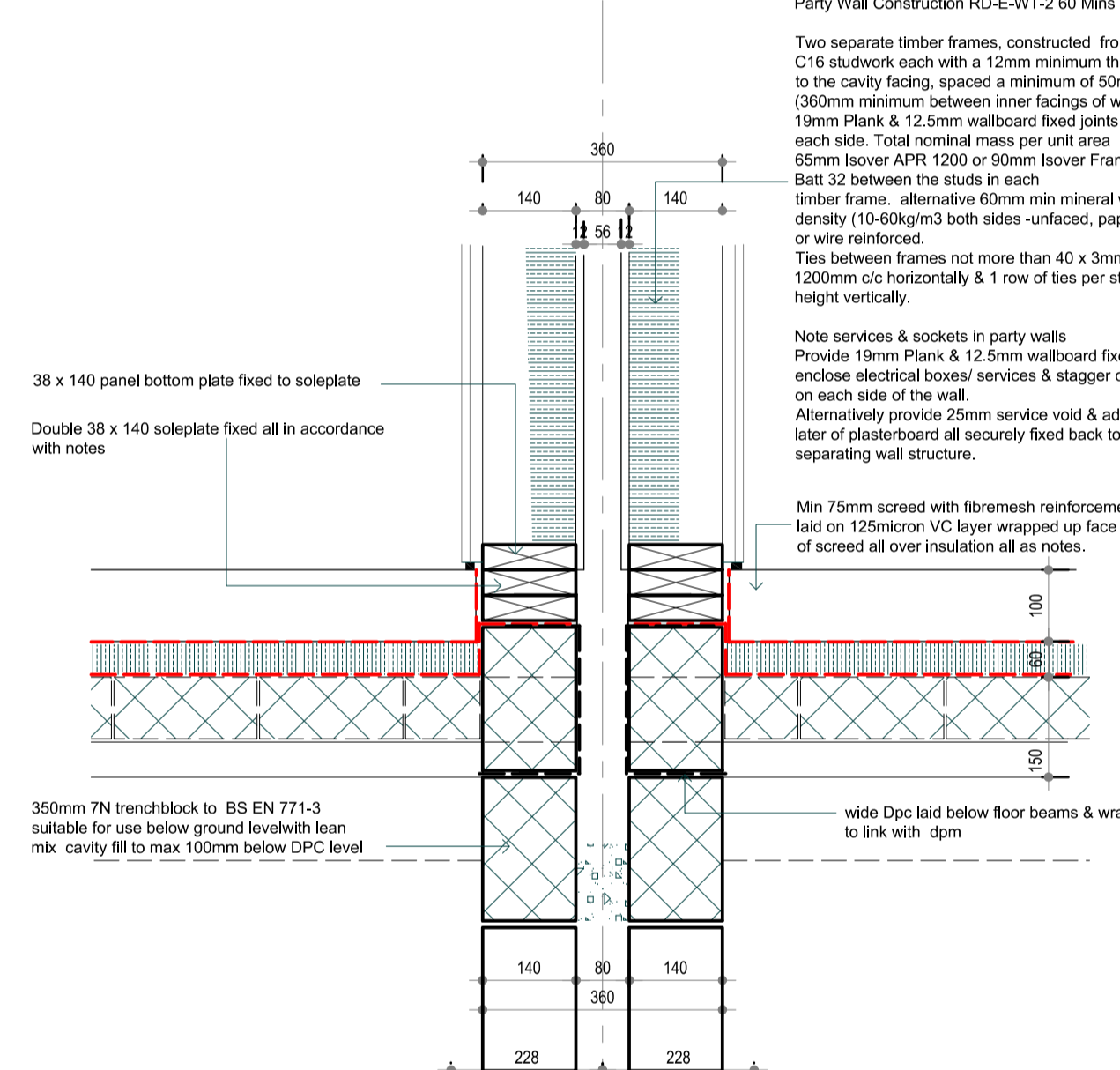
3.4 Horizontal Dpc's to be laid min. 150mm above adjacent ground level as work proceeds. Min 100mm laps to all joints & sealed with appropriate adhesive. DPC to extend through face of brickwork on both leaves of a cavity wall & lapped a minimum of 100mm. Step Dpc where applicable to relate to the differing ground levels. DPC to be either Hybrid or similar approved felt Dpc (to BS 6396, 1983) or 500 microns black polythene (200g) to BS 6515, 1984. Vertical Dpc's to be provided to all openings in external cavity walls and to be min 225mm wide. Provide vertical DPC sheet backing to rear of all meter boxes where built into external skin of brickwork.



External Wall French Doors



External Wall



Party Wall FOR FOUNDATION WIDTHS & DEPTHS REFER TO ENGINEERS DESIGN & DETAILS

Foundation Plan

Section 4.0 - FLOORS
 All details to be in accordance with BRE Guidelines and to NHBC Approval.

Refer to the structural engineers design and details. All foundations and concrete mixes to be agreed with S/E NHBC engineer and building inspector.
 Refer to drainage layout for actual drainage entry positions.

Floor insulation perimeter / area ratio p/a (233 / 107.5) = 0.21
 Floor insulation = Min 50mm CELOTEX FF4000 floor insulation - U value max 0.22

P = LOCATION OF DOUBLE, TRIPLE OR MULTIPLE POSTS TO STUD WALL ING OVER

4.1 DAMP PROOF MEMBRANE
 Damp proof membrane to be min 1200 gauge (0.3mm, 300 micron) polythene dpm (blue) to BS 6515, 1984 laid below or on the surface of the slab when below screed & always lapped to the external wall dpc by 100mm. All laps between sheets to be min 150mm folded over and taped.

4.2.1 GROUND FLOOR
 4.2.1 Precast beam and in-fill block flooring designed and manufactured in accordance with BS8110 Pt 1 1997 to manufacturers design and details laid on DPC in accordance with BS 743 and lapped a minimum into the existing DPC by 100mm with standard block in-fill 225mm minimum clearance underside of beams. Floors fully grouted to manufacturers requirements and levelled to take out camber & to suit insulation board. Insulation thickness as indicated below and dependant on P/A ratio of floor

Note: 1200 Gauge Dpm required if ground below floor has been excavated below the lowest level of external surrounding ground. Dpm's with taped & lapped joints min 100mm. Lap to wall DPC to be min

4.3 INSULATION U VALUES - WORKS TO EXISTING BUILDINGS - Max 0.22 W/m2K required under Part L1 A table A2
 MIN 50mm thick (P/A ratio as noted on ground floor layout) Kingspan Kooltherm K3 floor insulation to provide a K value of max 0.018 OR
 = similar approved 120mm thick rigid mineral wool insulation with 25mm membrane provided where insulation attached by measurement in accordance with the manufacturers recommendations all joints lapped min 150mm and taped.
 Provide minimum 25mm vertical strip of expanded insulation provided between edge of floor screed and wall.

4.3.1 SCREED - Min 65mm 1:3 sand/cement screed with light gauge mesh reinforcement D49 or D48 to BS4489 or Fibremesh additive (Agreement Certificate 922857 as an alternative.) Smooth level finish with perimeter insulation. Note: Should services require laying within screed provide suitable exposed access ducts.
 Allow screed sufficient curing time before laying any tiled or non porous finishes. Rule of thumb = 1 week per inch thickness @ 21 deg C

4.7 VENTILATION OF HOLLOW FLOORS: (BUILDING REGULATIONS REQUIREMENT WHERE RISK OF ACCUMULATION OF GAS.)
 Ventilation under suspended ground floors shall be minimum 75mm airspace between beam soffit and sub base (increased to 150mm where heavy may be possible) beams to be placed on Dpc. Sub floor stripped of vegetation and treated with non-selective weed killer. Alternatively provide 50mm thick concrete oversite. Sub floor to be ventilated with cranked and telescopic under floor ventilation ducts with 215 x 65mm plastic air bricks conforming to BS 5540 P2 2001 at maximum 1800mm centres with flexible damp proof tray over each with slip ends. (Vent of 1500mm² per actual 1m run of wall, not to be below external ground level). Vents set max 450mm from each end of any wall.

Terence C. Burton MCIAT
 CHARTERED ARCHITECTURAL TECHNOLOGIST
 CONTRACT
 MONKS GREEN FARM, MONKS GREEN LANE
 BRICKENDON, HERTS. SG13 8QL
 DRAWING TITLE
 OVERALL FOUNDATION LAYOUT

8 WHEEL WRIGHTS CLOSE
 BISHOPS STORTFORD
 HERTS.
 CM23 4QH
 TELEPHONE / FAX
 01273 304363

SCALE
 1 : 100
 DRAWING NUMBER
 11/MGF/SC/21

DATE
 OCT 2011
 REVISION
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REV A 8/11/2011 REVISED TO ENGINEERS LAYOUTS