

ALL DIMENSIONS IN MILLIMETRES.
 ALL MATERIALS AND WORKMANSHIP TO BE THE BEST OF THEIR RELEVANT KIND AND COMPLY WITH ALL BRITISH STANDARDS AND CODES OF PRACTICE.
 ALL ELECTRICAL WORK TO COMPLY WITH B.S. 7671 2008 AND TO BE CARRIED OUT BY A SELECT OR NICEIC APPROVED ELECTRICIAN.
 ALL WORK TO COMPLY WITH THE BUILDING STANDARDS (SCOTLAND) REGULATIONS 2004 AS AMENDED.
 ALL DRAINAGE TO BE TO THE SATISFACTION OF THE BUILDING CONTROL DEPARTMENT.
 BUILDING CONTROL TO BE NOTIFIED 24 HOURS BEFORE WORK COMMENCES AND WITHIN 2 WEEKS OF COMPLETION OF THE WORKS.

DO NOT SCALE FROM DRAWINGS, IF IN DOUBT ASK.
 ALL DIMENSIONS, LEVELS AND PITCHES TO BE CHECKED ON SITE PRIOR TO THE ORDERING OF ANY MATERIALS, FABRICATION OF ANY UNITS AND COMMENCEMENT OF ANY WORKS.
 CONTRACTOR IS DEEMED TO HAVE VISITED THE SITE TO ASCERTAIN THE FULL EXTENT OF THE WORKS.
 ALL DRAWINGS AND DESIGNS REMAIN THE PROPERTY OF AYRSHIRE ARCHITECTURE AND MAY NOT BE STORED OR REPRODUCED IN ANY FORM WITHOUT THE PRIOR WRITTEN CONSENT OF AYRSHIRE ARCHITECTURE.
 ANY DISCREPANCIES AND MISSING INFORMATION MUST BE IMMEDIATELY NOTIFIED WRITING TO AYRSHIRE ARCHITECTURE.
 ALL DRAWINGS MUST BE READ IN ACCORDANCE WITH ALL THE OTHER DRAWINGS PREPARED FOR THIS PROJECT

MAIN SPECIFICATION

FOUNDATIONS

Ground make up and depth of existing foundations to be checked prior to the commencement of any works. All foundations to be on a sub soil with a bearing capacity of 100kN/m² with 600mm minimum cover to underside or to same depth as existing house founds, whichever is greater. Foundations to be 200mm deep concrete strip foundations with one layer A252 mesh with 50mm bottom cover. Concrete to be 35 Newton and to BS 5328. Cement to be Ordinary Portland to BS 12. Aggregates both coarse and fine to be to BS 882. Nominal maximum size of aggregate to be 20mm. No concrete to be placed against frozen or frost covered surfaces.

UNDERBUILDING

To be 100mm common brick outer leaf with a 60mm cavity filled to ground level with lean mix concrete and an inner leaf of 100mm thick common brick. All underbuilding to be in good quality common brick. A DPC to be inserted 150mm minimum above finished ground level. New walls tied to existing with stainless steel starter kits. Facing brick to be built from two courses below ground level.

DAMP PROOF COURSES AND LEAD.

To cavity walls, cavity closures, firestops, steps and gills to be bituminous felt or PVC to BS 743. All leadwork for flashings, valley gutters etc to be in accordance with BS6915 : 2001 SOLUM

Solum to be 50mm concrete on 1000 gauge Visqueen DPM on 50mm sand blinding on 100 well compacted and consolidated hardcore. Finished solum level to be above adjacent ground level. 150mm minimum airspace between the underside of the floor joists and the finished solum level. Solum vented with 215 x 150mm F.A.I.s at maximum 2m centres, continuous through cavity with fireclay liners.

FLOOR

Floor level to be continuous from existing building into proposed extension and consist of 22mm moisture resistant T&G chipboard flooring on 150 x 50mm C16 joists at 400mm centres with 110mm thick Kingspan Thermafloor TF70 insulation laid between on 25 x 38mm battens. Where span of joists is greater than 2.5m full depth dwangs to be fitted at mid span of joists. Joists to be supported on a 100 x 25mm sw wallplate on a dpc onto dwarf wall. Joists supported at existing house wall on a galvanised mild steel joist hanger on a 150 x 50mm sw bearer fixed to wall at 500mm centres with M12 anchors.

SUPERSTRUCTURE

External wall construction to be 100mm facing brick, 50mm vented cavity and a timber framed inner leaf to be foil bubble breather building paper on 9.5mm sheathing grade plywood on 100 x 50mm sw studs at 600mm centres with 70mm Kingspan K12 rigid insulation board between studs and lined lined with 37.5mm Kingspan K18 insulated plasterboard with integral vapour barrier, all joints to be taped and filled. Stainless steel chevron wall ties fixed to slope away from sheathing and nailed with 2No. 50 x 3mm stainless steel ring shank nails. Wall ties fixed at 600mm centres horizontally and 450mm centres vertically, increased locally around door and window openings. Timber frame to have 2No. 100 x 50mm sw top runners with the uppermost top runner to be site fixed and 2No. 100 x 50mm sw bottom runners. Holding down straps to be 1100 x 38 x 3mm galvanised metal straps to every second stud and at every corner, straps fixed to studs using 5No. 90 x 4mm wide nails. Straps to be built into external leaf of common brick. Firestops to be 50 x 38mm sw timbers wrapped in DPC and positioned around window openings, at every corner, at eaves level and at ceiling and floor levels. Cavity ventilation to be provided at 1200mm centres by perpend cavity vents, situated in the brick course below dpc level, at eaves and above and below horizontal cavity barriers. Cavity weep vents at 900mm centres at ground level. New walls to be tied to existing with stainless steel starter kits to masonry outer leaf with a vertical dpc raggle and timber kit inner tied to existing wall with M12 anchor bolts at 500mm centres. Skirtings and facings to match existing.

INTERNAL PARTITIONS

Internal partitions to be formed with 75 x 50mm sw studs at 600mm centres with a minimum 25mm thick mineral wool insulation (minimum density of 10kg/m³) laid between studs and lined both sides with 12.5mm plasterboard (minimum mass per unit area 10kg/m²), all joints taped and filled. Internal partitions to provide a minimum airborne sound insulation level of 43Rw. Interior quality timber doors to be installed with the requisite ironmongery and to have a minimum clear opening width of 775mm.

WINDOWS & DOORS

Install new uPVC window units / doors with a U-value of 1.6W/m²K. A trickle vent to be fitted to the head, capable of providing 12000mm² ventilation. Any glass less than 800mm above FFL to be toughened in accordance with BS 6262. New doors and window units to meet the recommendations for physical security as set out in Section 2 of 'Secured by Design' (ACPO, 2009), or to be in accordance with BS PAS 24: 2007 for doorsets and BS 7950: 1997 for windows. uPVC units to be designed and constructed in accordance with BS 7412: 2007. All external doors to be fitted with laminated glass or a similarly robust glazing material.

MANUAL CONTROLS - WINDOWS

An openable window, rooflight or other ventilator, that provides natural ventilation to meet Standard 3.14, should have controls for opening, positioned at least 350mm from any internal corner, projecting wall or similar obstruction and at a height of: not more than 1.7m above floor level, where access to controls is unobstructed or not more than 1.5m above floor level, where access to controls is limited by a fixed obstruction, not more than 900mm high which projects not more than 600mm in front of the position of the controls, such as a kitchen base unit. Where obstruction is greater, a remote means of opening, in an unobstructed location, should be provided or not more than 1.2m above floor level, in an unobstructed location, within an enhanced apartment (see clause 3.11.2) or within accessible sanitary accommodation (see clause 3.12.3) not provided with mechanical ventilation ROOF

Where roof meets existing wall, install proprietary cavity trays and a 150mm code 4 lead flashing to be ragged into wall to a depth of 38mm and dressed down over tiles. Roof to be Redland Regent concrete roof tiles, through coloured with a 100mm min headlap, colour to match existing on 50 x 38mm sw battens and counter-battens on 1No. layer of Kingspan Nilvent breathable roofing membrane, installed in accordance with manufacturers written instructions on 12.5mm timber sarking planks on pre manufactured roof trusses at 600mm centres. Roof pitch to be 12.5°. Design certificate for roof trusses to be submitted to Building Control and or structural engineer prior to works being completed on site. Roof bracing to be in accordance with truss manufacturers recommendations and BS 5268 Part 3. All roofing for ridge, verge etc. to be dry fixed in accordance with manufacturers details. 200mm mineral wool insulation to be placed between the ceiling ties of the trusses with a further 200mm mineral wool insulation placed above and at right angles to the insulation between ties. Ceiling finish to be 12.5mm plasterboard with all joints taped and filled. Trusses to be tied down with galvanised metal Bat truss clips. Gable restraint straps to be galvanised metal engaging 3No. trusses and built into outer leaf of brickwork, 3No. per gable and to be fitted to rafters. Trusses supported at existing house wall on a galvanised metal joist hangers on a 150 x 50mm sw bearer fixed to existing wall with M12 anchors. All external fascia, verge and soffit boards to be white upvc boards. 100mm half round uPVC rainwater gutter.

TOILET

WC to be fitted with the appropriate sanitaryware, as selected by the client and to have the necessary piped supplies of hot and cold water. 38mmØ uPVC waste pipe outlets with 75mm deep seal traps to all appliances and 100mmØ uPVC waste pipe from wc connected to svp with hand hole access and discharged into existing drain via 100mmØ waste pipe. Waste pipe to be laid with a minimum fall of 1 in 40. WC and whb to be fitted with water efficient fittings and average flush volume not more than 4.5 litres for WC and wash hand basin to have flow rate not more than 6 litres per minute. Sanitary pipework to comply with BSEN12056-2:2000.

ELECTRICAL FITTINGS

Outlets and controls of electrical fixtures and fittings should be positioned at least 350mm from any internal corner, projecting wall or similar obstruction. Light switches should be positioned between 900 and 1100mm above floor level. Standard switched or unswitched sockets should be positioned at least 400mm above floor level and 150mm above the projecting surface such as a worktop obstruction. Where sockets are concealed, separate switching to be provided in an accessible position to allow appliances to be isolated. New light fittings to be low energy type.

A mains operated smoke alarm with battery back-up to be installed in accordance with BS 5446: Part 1 (2000). Smoke alarm to be no more than 7 metres from living room and kitchen doors and no more than 3 metres from bedroom doors. All smoke alarms to be interconnected. Ceiling mounted alarm to be more than 300mm from walls and light fittings.

A heat alarm to be installed within the kitchen in accordance with BS 5446: Part 2 : 2003 and ceiling mounted between 25 mm and 150mm below the ceiling.

GENERAL

Sanitary pipework to comply with BS EN 12056-2:2000. External waste water drainage to comply with BSEN 12056-1:2000, BS EN 752:2008 and BS EN 1610: 1998. Surface water drainage to comply with BS EN 12056-3: 2000

Radiators to be fitted with a thermostatic radiator control valve.

At door jambs proprietary insulated cavity closure and a vertical DPC inserted.

All finishes to be made good on completion of works.

U-VALUES

Roof	-	0.13W/m ² K
Glazing	-	1.6W/m ² K
Floor	-	0.18W/m ² K
Walls	-	0.22W/m ² K

Indicates span of 150 x 50mm C16 joists at 400mm centres on a 100 x 25mm SW wallplate on a DPC. Full depth dwang at midspan of joists.

FAI 215 x 75mm fresh air inlet with fireclay cavity liner.

FOUNDATIONS

Minimum frost cover to underside of foundations to be 600mm. Foundations to be 200mm deep concrete strip foundations with one layer A252 mesh with 50mm bottom cover and taken to the same depth as existing house foundations. Any steps in the foundations to be max 200mm in any step and overlapped by at least 400mm.

UNDERBUILDING

To be 100mm common brick outer leaf with a 60mm cavity filled to ground level with lean mix concrete and an inner leaf of 100mm thick common brick. All underbuilding to be in good quality common brickwork. A DPC to be inserted 150mm minimum above finished ground level. Dwarf walls to be built solid.

SOLUM

To be 50mm concrete on 1000 gauge Visqueen on 50mm sand blinding on 100mm well compacted and consolidated hardcore. Finished solum level to be above adjacent ground level. 150mm minimum airspace between the underside of the floor joists and the finished solum level. Solum vented with 215 x 150mm F.A.I.s at maximum 2000mm centres, continuous throughout cavity with fireclay liners.

UNDERBUILDING

To be 100mm common brick inner and outer leaf 60mm cavity filled to ground level with lean mix concrete. 600 x 200mm deep concrete strip foundations with one layer A252 mesh

100mm comon brick dwarf wall for store walls built solid off a 500 x 200mm deep concrete strip found..

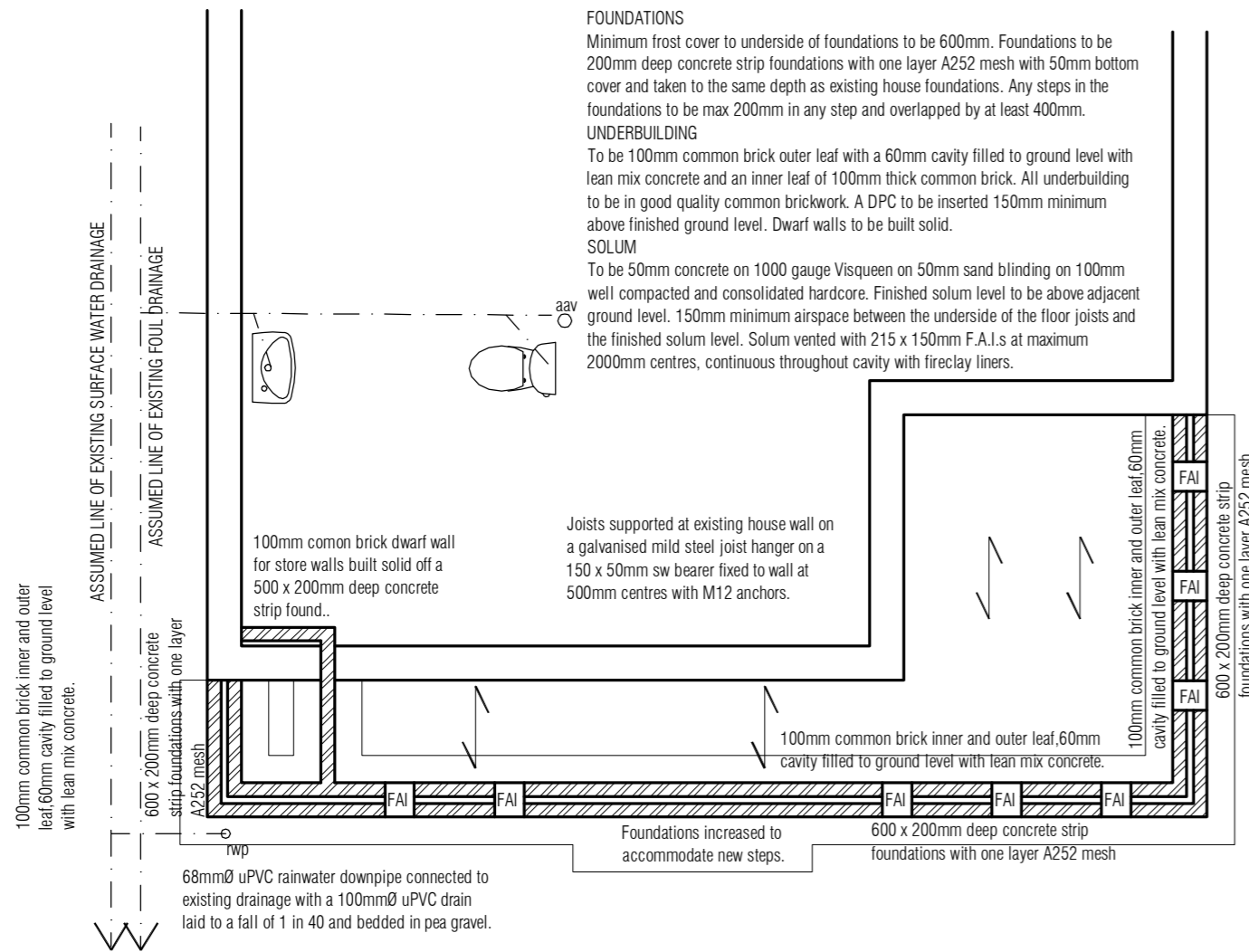
Joists supported at existing house wall on a galvanised mild steel joist hanger on a 150 x 50mm sw bearer fixed to wall at 500mm centres with M12 anchors.

100mm common brick inner and outer leaf 60mm cavity filled to ground level with lean mix concrete.

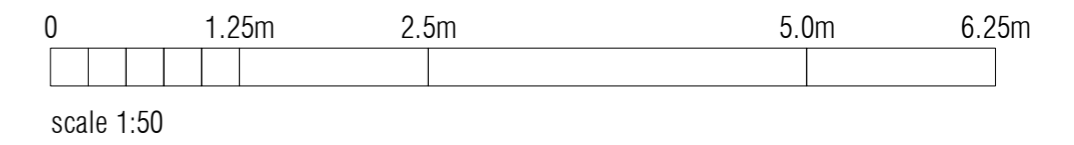
600 x 200mm deep concrete strip foundations with one layer A252 mesh

Foundations increased to accommodate new steps.

600 x 200mm deep concrete strip foundations with one layer A252 mesh



PROPOSED FOUNDATION, DRAINAGE AND UNDERBUILDING PLAN 1:50



ALL DRAWINGS TO BE READ IN CONJUNCTION WITH THOSE PREPARED BY THE STRUCTURAL ENGINEER WITH THEIR DRAWINGS TAKING PRECEDENCE IN ALL STRUCTURAL MATTERS.

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PROJECT DETAILS:
 Proposed single storey extension
 at
 9 Dalmore Place, Irvine
 for
 Mr & Mrs Drever

PROJECT REFERENCE:
 Drever 2034

DATE:	SCALE:	PAPER SIZE:	DRAWN BY:	DRG No:
Mar 2021	as shown	A2	AMcC	02

REVISIONS: