

CONSTRUCTION NOTES...

FOUNDATIONS...
Grade C30 Concrete strip foundations laid on load bearing strata, 450mm below finished ground level.
External Walls: 700x200mm
Internal walls: 500x200mm
Ground conditions must be checked on site as the above sizes are for good ground bearing conditions. Structural Engineer to be informed if any variance in ground conditions occur over site. Top of foundations minimum 450mm below finished ground level. Steps in foundation to be 225mm high with a 500 mm horizontal overlap.
SUBSTRUCTURE:
300mm concrete block 7N strength / min density 1800kg/m3 and compressive strength 7.0N/mm2 set in 1:6 cement / sand mortar in accordance with BS 5628, walling to ground level then cavity block to dpc level 100/50/150mm. Cavity filled to ground level with weak mix concrete.
DPC:
All horizontal and vertical DPC's to be 1000 gauge and placed 150mm min. above ground level horizontally and 150mm vertically. DPC to be lapped at all corners.
DPC to all openings. All dpc/dpm members to overlap. DPM joints in floor to be minimum 150mm lapped and taped prior to concrete being laid.
GROUND FLOOR...
100mm concrete laid over 125mm Kingspan T770 insulation board and min 20mm all round edge of concrete floor slab laid over 1000gauge polythene dressed up wall all round and lapped with wall dpc on 50mm sand on 150mm compacted hardcore.
SUPERSTRUCTURE:
External walls constructed with 100mm dense blockwork 7N strength-density 204kg/m3 faced with 20mm light buff render as per elevations.
100x220mm prestressed lintols up to 1500mm wide opening. 100x140mm prestressed lintols for less than 1500mm wide opening. All lintols to have 200mm rest either side.
Brickwork reinforcement installed two courses above all openings extending 600mm past edge of opening.
50mm cavity barriers at 4500mm ctrs at ceiling level, round door/window openings and at verge and within 300mm of internal/external corners, both sides of separating wall.
Tyvek reflex stitch stapled through to 9.5mm sheathing OSB Board on 147x45mm structural framing at 600mm ctrs with double top and bottom rails. All joints in binder to be above studs and be staggered. Frame held in place with 120x45mm galvanised straps built into outer leaf and nailed at least 4 times to timber frame. Straps at 1200mm ctrs and round all openings.
Stud walls lined internally with 12.5mm DUPLIX plasterboard, taped and filled.
150mm insulation quilt rated 0.02 fitted between vertical timber stud frame studs.
Stainless steel wallties nailed at 600mm ctrs horizontally & 450mm vertically. Wall ties doubled.
Pitched roof ... movement joints (i.e. every course vertically). Cavity slot vents at 1200mm ctrs along eaves line, rafter line, horizontally each side of cavity barriers and below DPC level, up gable walls as necessary.
Timber lintols over openings to be constructed with 3x197x45mm timbers spiked together at 300mm staggered centres. Support to be as follows: - No cripple stud up to opening width of 1200mm, 2/No cripple studs to openings of 2100mm, 3/No cripple studs to openings up to 3600mm. Engineer design for any opening larger than 3600mm.
Walls round accessible wc to be lined with 12mm plywood under plasterboard to allow for fixing of future grabrails and other aids.
Dormer walls ... vertical hung grey slate nailed through Tyvek reflex to 10mm OSB board nailed to 145x45mm C16 timber stud frame with bottom member shot fired to steel beam support.
150mm insulation quilt within frame faced internally with 12.5mm Duplex wallboard.
PARTITIONS:
Partitions constructed with 70x45mm framing at 600mm ctrs with double top and bottom stud frame if loadbearing, single if non-load bearing. All frames infilled with 75mm insulation quilt. 12.5mm plasterboard screw fixed at max 200mm ctrs both sides with taped/filled joints.
5x12mm pencil round skirting boards all round with door blocks giving break to door facings.
ROOF...
Pitched roof ... grey slate nailed through 1 layer of reinforced roofing felt to 20mm butt jointed sarking board nailed to prefabricated roof trusses at 30 degree pitch fixed with galvanised truss clips fully nailed to timber wallhead frame. 1200x50mm galvanised straps nailed over first three trusses at gables. 25x100mm longitudinal and diagonal bracing to be nailed at node points.
Code 4 lead flashings to be used in all valley gutters feeding into pvc gutters nailed to fascia.
Roof ventilation by 10mm continuous vent strips at soffits, 5mm at ridge.
150mm + 150mm layer of insulation quilt laid throughout flat roof space, all fitted over new wallhead to reduce cold spots set at right angles to each other.
Flat roof ... 1 layer fibreglass laid over 10mm OSB board nailed to 180x45mm timbers set at 600mm ctrs nailed through 1 layer vapour barrier to 10mm OSB board on tilting fillets to 145x45mm C16 timbers with 12.5mm Duplex wallboard screw fixed to underside as ceiling.
Ceiling lined with 12.5mm duplex wallboard with all joints taped/plastered ready for decoration.
Access hatch to loft area to be constructed with 19mm blockboard or similar approved with hinged access and pull down timber folding ladder. Hatch to be insulated using 105mm rigid board insulation bonded to top side. PVC seal to be installed all round to prevent draught ... located in hall.
S&VP's to rise through roof with lead flashings as necessary over tiles.
MOVEMENT JOINTS:
Structural movement joints (MJ) fitted as indicated on plans and constructed with 6mm mastic sealed joint formed with render stop beads, stainless steel wall ties at every course.
GLAZING:
All glazing below 800mm to be toughened safety glass to BS6262: Part 4: 2005
All glazing below 1500mm in doors and side lights to be toughened safety glass to BS 6262: 2005
Protective barrier fitted in front of all glazing below 800mm above floor level capable of resisting loads specified in BS 6399: Part 1: 1996

ELECTRICAL:

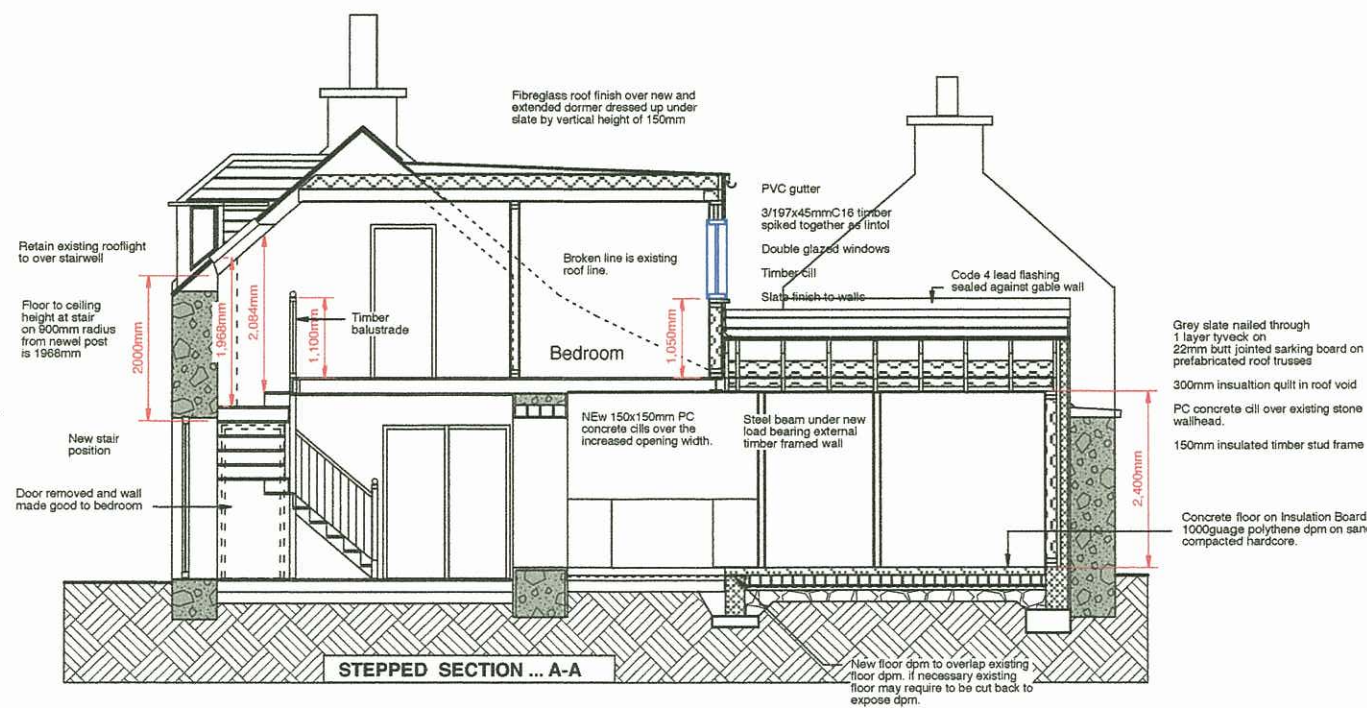
All electrical work to be installed as per current IEE regulations fitted with RCB's.
Kitchen/utility extract 60l/sec, bathroom, en-suite extract 15litre/sec
Switch outlets positioned min. 350mm from internal corners, projecting walls or similar obstructions and not more than 1.2m above floor level. Light switches positioned between 900mm and 1100mm above floor level. Sockets should be min. 400mm above floor level and 150mm min. above worktops.
SMOKE DETECTORS/FIRE ALARM UNITS:
Electrically operated smoke detector/fire alarm wired to independent circuit electrically protected consumer unit, complete with battery backup.
All detectors to be interconnected to ensure all operate when activated.
Smoke detectors located minimum 3m from bedrooms and 7m from lounge, 300mm from light fittings.
PLUMBING & DRAINAGE:
100mm dia. PVC gutters with brackets at 600mm ctrs & 68mm dia. UPVC drains laid to 1:60 fall with 600mm min. invert depth complete with all fittings etc. laid as per manufacturers instructions and trenches backfilled with pea gravel, round pipes all as per BS 6321.
Where pipe passes under walls a lintol should be provided over opening formed to prevent any pressure on drainage.
Surface water to new soakaways noted on layout plan in front gardens, complete with rodding eyes at every junction and laid to fall.
Waste water drain, 100mm dia pvc, connected with manholes to existing foul drains in adjacent road, see layout plan for details. Trenches backfilled with pea gravel min 600x500mm.
Internal drainage pipe sizes to be as follows:-
WC 100mm UPVC
WBH 40mm dia. ABS
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BATH 40mm dia. ABS
SINK 40mm dia. ABS
SHOWER 40mm dia. ABS
All traps to have 75mm deep seals, drainage pipework over 6.0m to be vented.
Internal access for rodding purposes to be located 1.0m above floor level.
Install Megaflo hot water tank in first floor cupboard.
Hot water storage should not be less than 60 degrees and distributed at a temperature of not less than 55 degrees C. *Final discharge pipe from megaflo system to be through roof and flush into gutter.
Discharge from sanitary fittings to prevent scaling should not exceed 48 degree C.
If thermostatic mixing valves are used then the above temperatures apply to BS EN 1111:1999 or BS EN1287: 1999 and fitted as close as possible to outlet.
S&VP to rise min 900mm above any window within 3.0 metres.
Manholes to be 600mm diameter with light weight cover.

ACCESS STEPS / RAMP:

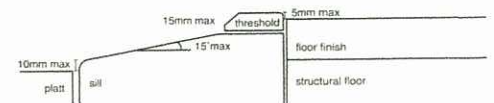
Access steps to be pre-cast concrete with 170mm rise and 300mm tread.
Threshold to be no higher than 15mm with a min. angle of 15 degrees see detail ... disabled access to be through rear door having level access, min. 1000mm clear width with 600mm wide edge protection at same pitch feeding to paved patio having 1200x1200mm concrete platt at door.
HOT & COLD WATER:
All hot and cold water heating pipes and hot water pipes to be insulated to comply with BS 5422: 2001.
Thermostatic mixing valve limited to max 48°C and comply with BS EN111:1999 or BS EN 1287: 1999.
WINDOWS/DOORS:
Double glazed high performance timber faced pvc windows with adjustable vents (10,000mm sq. min.). All safety/ toughened glazing to be designed to BS6262: Part 4: 2005.
External doors to be high performance with double glazed panels.
Trickle vents to give an average of 4000mm sq.m. up to 10eq.m thereafter an additional 400sq mm for each additional square metre.
Apartments to have 10,000sqmm, all other rooms min 4000sqmm.
Trickle vents should be min 1.75m above finished floor level.
Windows to have opening sections as per elevations.
External doors to have 5 lever locking mechanism.
All opening windows to be fitted with an internal locking mechanism.
STAIR...
All timber construction as follows with no part of stair to allow passage of a 100mm dia. sphere.
Rise 190mm
Going 225mm
Pitch 40.2 degree
Handrail 900mm
Headroom 2000mm

SANITARYWARE:

Ceramic shower tray. Walls clad with ceramic wall tiles fixed with moisture resistant BAL grouting on 12.5mm moisture resistant plasterboard.
Anti-scaled valve fitted to BS1415 to shower and bath.
Trap to be accessible for cleaning.
MECHANICAL VENTILATION:
Mechanical extract fan capacities ducted to external air wired to independent switch as follows:
Kitchen ... 60l/sec, Utility room ... 60l/sec, bath, shower & wc ... 15l/sec
Vertical ducts to be fitted with condensation trap.
All ducts to soffit vent kept away from window openings.
Trickle vent to all rooms to be 400sqmm under 10eq.m, with additional 400sq mm for every sq.m above this.
AIR INFILTRATION:
Infiltration of air into buildings is to be prevented as far as reasonably practicable by:
A... sealing dry lining junctions between walls and ceilings and floors and at window, door and roof openings.
B... Sealing vapour control membranes in timber framed and other framed panel construction.
C... Sealing at services pipe penetrations through the fabric of the building and around pipe and other service boxing.
D... Fitting of draught exclusion strips in the frames of opening sections of windows, external doors and rooflights.
CENTRAL HEATING:
Extend central heating pipework to thermostatically controlled radiators in all rooms fed from wall mounted combi-boiler in kitchen complete with all pipework to make system work and be fully insulated.
Heating is oil fired with boiler in Kitchen. Flue through roof fitted with flashing, flue to be min 25mm from combustible materials. Heating system pressurised.
Boiler interlock fitted. 25mm gyproc wallboard to line walls adjacent to boiler to give fire protection to structure.
Boiler fitted with indelible label indicating working capacity.
7 day programmer for both heating and hot water located in kitchen.
Hot water tank fitted with separate electric immersion.
Heating to be sufficient to maintain 21 degree temp in one room and 18 degrees throughout house when outside temperature is 1 degree.
Heating installation to be commissioned to give optimum energy efficiency in accordance with manufacturers written instructions.
Written instructions on the operation and maintenance of the heating and hot water system and any decentralised equipment for power generation to encourage optimum energy efficiency to be provided to occupant.



THRESHOLD DETAIL AT REAR DOOR...



IF IN DOUBT ASK		
DO NOT SCALE FROM THIS DRAWING		
REV	DATE	REMARKS
CLIENT:		
Kerstin Kramer		
6 Sterlochy Street, Findochty		
PROJECT		
Proposed extension and refurbishment of house		
TITLE		
Elevations, Section, specification		
SCALE	DATE	REV
1:50,	09.02.12	
DRG No	A1057.11.03	
REV		
KEA		
Keith Edwards Architect		
1B East Street, Fochabers IV32 7DY		
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