

CONSTRUCTION NOTES...

FOUNDATIONS...

Grade C30 Concrete strip foundations laid on load bearing strata, 450mm below finished ground level.
Internal walls: 700x200mm
External 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 500mm horizontal overlap.

SUBSTRUCTURE...

7N strength / min density 1800kg/m³ and compressive strength 7.0N/mm² set in 1:8 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.

GROUND FLOOR...

100mm concrete laid over 150mm Celotex GA400 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. 215mm thick on east boundary 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 half place with 120x50mm 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. Walls within 1m of boundary to have 2-12.5mm plasterboard sheets with staggered joints applied to give 1m fire protection faced with 45x25mm timber battens at 600mm ctrs faced with 12.5mm plasterboard to allow for service space. New wall constructions only at ground and first floor. 150mm Celotex GA400 fitted between vertical timber stud frame studs.

Stainless steel wallties nailed at 600mm ctrs horizontally & 450mm vertically. Wall ties doubled at movement joints. (ie every course vertically). Cavity slot vents at 1200mm ctrs along eaves line, latter line, horizontally each side of cavity barriers and below DPC level.

Timber lintols over openings to be constructed with 3x197x45mm timbers spiked together at 300mm staggered centres. Support to be as follows. 1 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 detail for any opening larger than 3600mm.

Walls round accessible w/c to be lined with 12mm plywood under plasterboard to allow for fixing of future grabrails and other aids.

Dormer walls... vertical hung grey slate or timber Larch cladding (see elevations for choice) nailed to 45x45mm treated timber battens through Tyvek reflex to 10mm OSB board nailed to 145x45mm C16 timber stud frame with bottom member shot fired to steel beam support. 150mm Celotex GA400 within frame faced internally with 12.5mm Duplex wallboard. Walls within 1m of boundary to have 2-12.5mm plasterboard sheets with staggered joints applied and have no service penetrations.

Fire barrier installed max 10metres apart vertically round building and/or at corners using Termit FF102/50 Ventilated Fire Barrier, a rigid, high expansion intumescent strip encased in aluminium foil. FF102/50 mechanically fixed both horizontally and vertically within ventilated cavities behind timber cladding systems acting as a cavity fire barrier.

FF102/50 product is 6mm x 75mm x 1000mm gives 30minute horizontal and 60minute vertical fire resistance.

PARTITIONS:

Partitions constructed 2No 12.5mm gypsum board min 10kg/m² having staggered and taped joints both sides as noted in generic detail type 1 for timber frame construction screw fixed at max 200mm ctrs both sides with taped/filled joints. 1 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 detail for any opening larger than 3600mm.

ROOF:

Pitched roof, grey slate nailed through 1 layer of breathable membrane to 20mm butt jointed sarking board nailed to prefabricated roof trusses at 30 degree pitch over lean to area and min 22 degree over bed/bath at first floor level 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 over fascia board and under felt, 5mm at ridge. Mono pitch using Glidewall slate vent set at 1500mm ctrs 2 slates down from lead flashing.

200mm + 150mm layer of insulation quilt laid throughout ceiling space, all fitted over new wallhead to reduce cold spots set at right angles to each other. 180mm thick Celotex GA400 in all comb ceilings.

Ceiling lined with 12.5mm duplex wallboard with all joints taped/plastered ready for decoration. Access to roof to left area to be constructed with 180mm thick Celotex GA400 or similar approved. Hatch to be insulated using 180mm rigid board insulation bonded to top side. PVC seal installed all round to prevent draught. Located in hall.

SBVP'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 15l/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 units 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 maximum 3m from bedrooms and 7m from lounge, 300mm from light fittings.

PLUMBING & DRAINAGE:

100mm dia. PVC gutters with brackets at 600mm ctrs & 68mm dia. PVC downpipes with holderbats at 1800mm ctrs, 100mm 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 8301.

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 600x600mm.

INTERNAL DRAINAGE PIPE SIZES TO BE AS FOLLOWS:

WC: 100mm
WBH: 40mm dia. ABS
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 Megaflow 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 megaflow system to be through roof and flush into existing 'cast iron' gutter.

Discharge from sanitary fixtures to prevent scalding should not exceed 48 degrees 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. SBVP to rise min 900mm above any window within 3.0metres.

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 path. min. 1000mm clear width with 600mm wide edge protection at same pitch feeding to paved patio having 1200x1200mm concrete slabs at door.

HOT & COLD WATER:

All hot and cold water heating pipes and hot water pipes to be insulated to comply with current BS5422:2009. Thermostatic mixing valve limited to max 48°C and comply with BS EN1111:1999 or BS EN 1287:1999.

WINDOWS/DOORS:

Double glazed high performance timber framed 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 ventilation to apartments to have 12,000sqmm, all other rooms min 10,000sqmm.

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 160mm
Going 225mm
Pitch 40.2 degree
Handrail 900mm
Headroom 2000mm

*Secured By Design (SBD):

Doors... Front entrance doorsets shall be certificated to one of the following standards:
--PAS 24:2007 (Note 21.1.1) or
--WCL 1 (Note 21.1.2)
Windows... The SBD standards for ground floor, basement and easily accessible windows (Note 28.1.1) are as follows:
--BS 7950:1997 or
--WCL 4 (Note 28.1.2)

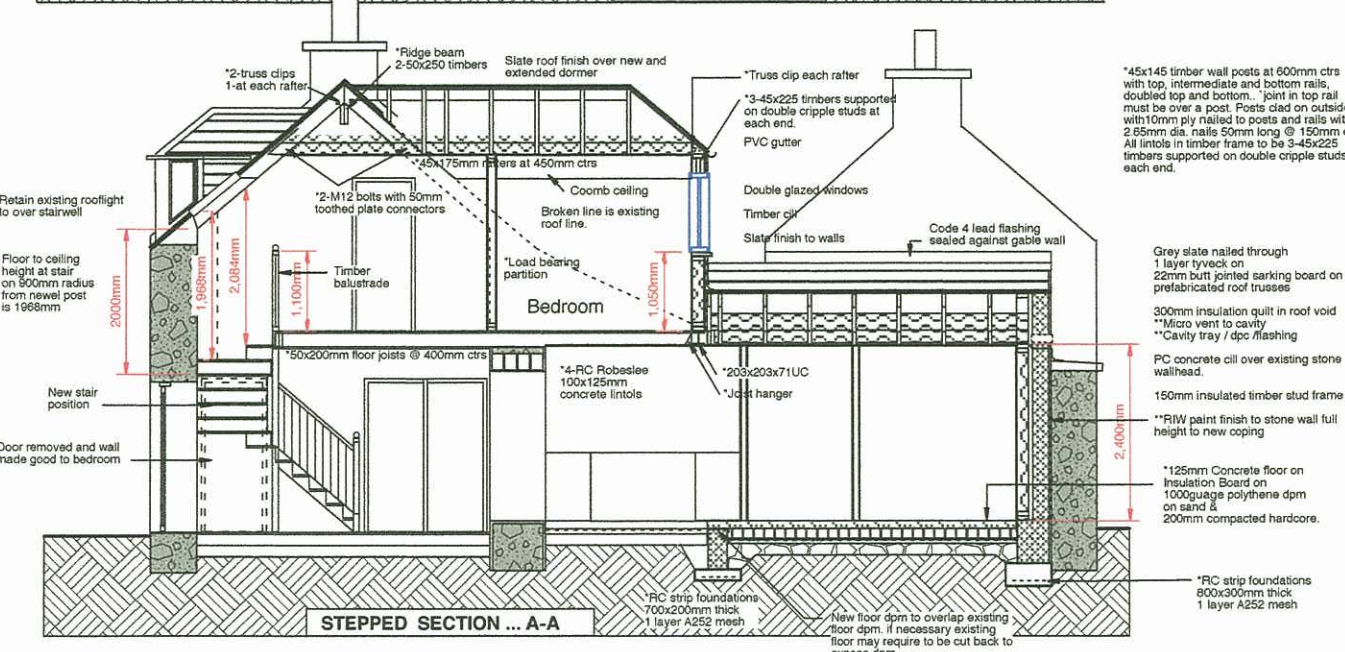
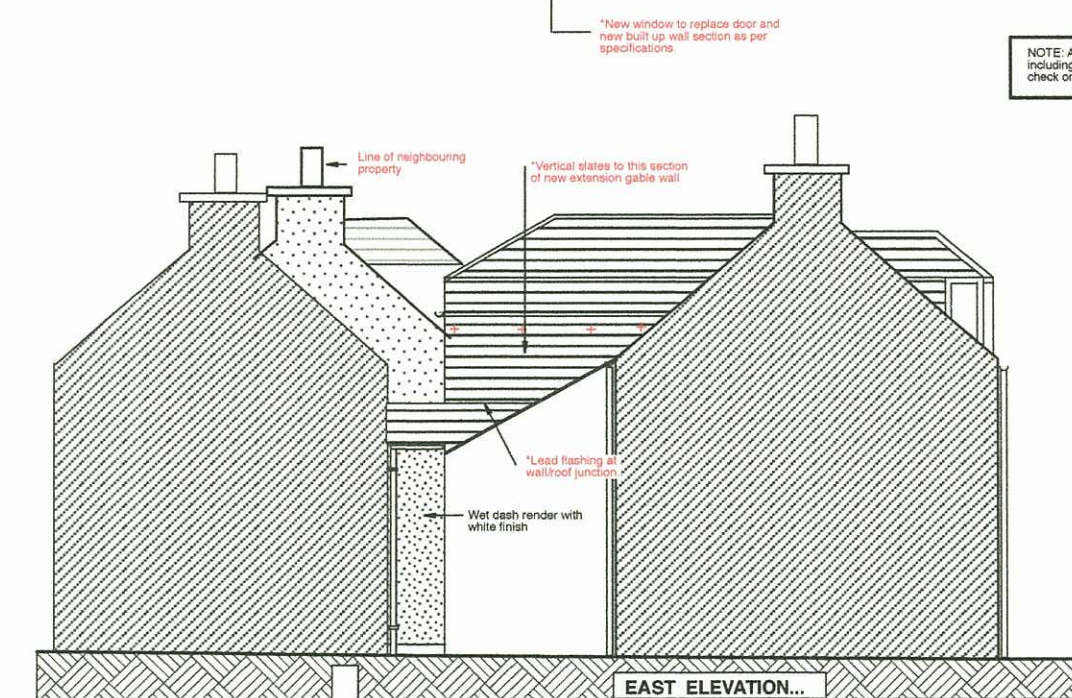
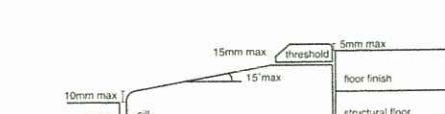
All windows must incorporate key lockable hardware unless designated as emergency egress routes, 1 b

STRUCTURAL NOTES...

All structural timbers to be grade C24 to BS 5688. All lintols in timber frame to be 3-45x225mm supported on double cripple studs each end. All timber to timber fixings at bridges, beams etc made using fully nailed joist hangers speedy type.

Foundations built off original subsoil bearing pressure o of 200kN/m². If soft spots noted contact Engineer. Minimum cement content 250kg/M³. Top of foundation 450mm below finished ground level. 7N dense blockwork min. density 1800kg/m³ and mortar designation (111) all to BS 5628. Robeslee RC lintols 100x215mm type K9 non-composite with min. bearing of 200mm. Load bearing partitions 50x100mm @600mm ctrs with top, intermediate and bottom rails doubled top and bottom. Joint in rail must be over post.

THRESHOLD DETAIL AT REAR DOOR...



SANITARYWARE:

Ceramic shower tray. Walls clad with ceramic wall tiles fixed with moisture resistant BAL grouting on 12.5mm moisture resistant plasterboard. Anti-scaud 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 10sqm, with additional 400sqmm for every sqm 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 store. Flue through roof fitted with flashing, flue to be min 25mm from combustible materials. Heating system pressurised. Boiler interlock fitted, 25mm glyproc wallboard to line walls adjacent to boiler to give fire protection to structure. Flue is insulated stainless steel within room and loft and angle pipe externally. Flue to rise min 900mm above roof finish. 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.

IMPORTANT SAFETY INFORMATION

This label must not be removed or covered.
Property address:
The fire escape opening located in the...
Do not use as a store for flammable or explosive materials.
Do not use as a store for highly flammable or highly explosive materials.
Do not use as a store for highly flammable or highly explosive materials.
Do not use as a store for highly flammable or highly explosive materials.

*Label to be attached to boiler in store in full sight and be indelibly marked.

IF IN DOUBT ASK

DO NOT SCALE FROM THIS DRAWING

REV	DATE	REMARKS
C	10.08.12	Roof over dormer altered
B	08.08.12	Notes marked ** added
A	14.06.12	Notes marked * added

CLIENT:

Kerstin Kramer

6 Sterlochy Street, Findochty

PROJECT

Proposed extension and refurbishment of house

TITLE

Elevations, Section, specification

SCALE

1:50,

DATE

09.02.12

DRG NO

A1057.11.03

REV

C

KEY

1B East Street, Forthabers IV32 7DY

tel: 01343 82910

e-mail: keith@ke-architect.com

KEA

Keith Edwards Architect