

General Specification

All building works to be carried out in accordance with Building Scotland Act 2003 and the current technical standards. In accordance with Small Buildings Structural Guidance - July 2010.

Electrical Specifications

All electrical installations are to comply with the relevant requirements of BS 7671:2008 and comply with the up to date IEE Regulations.

Electrical fixtures (i.e. sockets, switches) to be positioned min 350mm from internal corners etc. at a height of 400mm from FFL, sockets above worktops etc. to be 150mm above projecting surface.

No. of sockets:  
Minimum 3 within each apartment.  
Minimum 6 within kitchen, (min. 3 to be situated above worktops in addition to outlets provided for floor standing white goods or built in appliances.  
Minimum 4 elsewhere within dwelling with min. 1 within each circulation area per storey.

Light switches to be positioned between 900mm to 1100mm from FFL.

All by SELECT/ NICEIC approved electrician . 75 % of the new lighting to be low energy ,luminous efficacy at least 45 lumens/circuit watt .

Mechanical Ventilation

New dining area to be mechanically ventilated by 60l/s fan through 100mm diameter pvc duct taken direct to external air (cored through cavity wall) and fitted with weather and vermin proof covers.

Radiator

Radiator position shown indicatively. Type and sizes of radiator to be determined using BTU calculator. All pipework under floor to be correctly sized and insulated for energy efficiency and frost protection. TRV to be fitted to radiator.

Thermal Bridging and Air Infiltration

Insulation to be tightly fitted together between studs including into door reveals, floor joists, flooring and ceiling junctions.

Plasterboard joints to be ames taped both vertically and horizontally where required.

SPECIFICATION - REAR EXTENSION

All work to Building (Scotland) Act 2003 and Building (Scotland) Regulations 2004 as amended 2019.

Roof- Firestone Rubbercover EPDM System or equal on 100mm Kingspan TR27 insulation on vapour barrier on 12.5mm ply

on 195 x 50mm roof joists at 400 crs with 50mm Kingspan K7 between. 12.5mm VC plasterboard ceiling to finish taped and filled. Flat roof joists supported off timber frame wall construction.

Glazing -Low E double glazing . Glass to BS6262 . Area weighted U value of unit 1.4 W/m2K. 12000mm2 permavents. Toughened laminated glass. Security to Standard 4.13 tested and certified in accordance with BS 7950:1997 for windows and PAS 24:2007 for doors plus police initiative 'Secured by Design'.

Walls - Common Brick roughcast , 50mm cavity, breather foil FR on 9mm plywood on 100 x 50mm sw studs at 600mm centres with 100 Kingspan TW 55 between, vapour check, 12.5 plasterboard finish. 32.5 Kingspan K18 finish to walls with openings to limit thermal bridging to all reveals ie. cills, heads and jambs. Finish taped and filled. Additional 12.5mm plasterboard to any wall within 1m of the boundary including returns to give 60min fire duration to these walls (any electrics on these walls to be surface mounted or have intumescent backed boxes).

Floor - 22mm chipboard OPI 195 x 50mm C16 sw floor joists at 400mm crs with 250mm mineral wool insulation between joists on mesh, 200x50 sw dwangs at mid span. Joists supported off substructure.

Solum - 150mm well compacted blinded hardcore (Type 1) with 1200g Visqueen dpm above lapped under dpc. 50mm concrete cover.

Foundation -600 x 200mm strip foundation with A252 mesh reinforcement , dowelled into existing foundation with 100 thick 7/Nmm2 blockwork underbuilding.

U value of roof 0.15 W/m2K, U value of walls 0.22 W/m2K and U value of floor 0.18 W/m2K. Existing house U values of walls and roof are greater than 0.7 and 0.25 W/m2K respectively. Existing walls have been part cavity filled giving 0.45 U value and existing roof has 200 mineral wool giving a 0.22 U value . Column B of Standard 6.29 can therefore be adopted.

Grade of Materials - Class 3 bricks 21 N/mm2, Class 3 mortar 1/1/6, Timber min. C16, Concrete '35' . Construction timbers all to be stress graded .

Ground - Bearing capacity of 65 KN per m2 . All soft and organic materials removed . Props -All to remain in place till works have cured.

Connections and Fixings -Connect new wall to existing using ms 'Expamet' connector plates . Stud partitions fixed to existing wall using M10 resin anchors at 450mm centres. Timber frame connected to brickwork using Catnic BT2 ties at 600mm horizontal and 300mm vertical centres . Vertical dpc where new wall abutts existing. Nailing specification for plywood sheathing panels . 3.2mm diameter nails at 100mm centres around the perimeter and 150mm centres elsewhere.

Skirting - 95 x 15mm pencil plain red pine or similar.

Cavity Fire Stops - To be fitted to along all openings, corners etc. at maximum 1800 crs and at wallhead . Ope provision to all stops . Rockwool TCB cavity closers to timber frame giving 30 minutes fire resistance.

Ventilation -Permanent ventilation to underfloor provided at rate of 500mm2 per m2 of floor area. Perpend vents to be placed at top and bottom of cavity at 1200crs in accordance with BS 2520 : 2002. Infiltration - Limited . All gaps between windows, doors and roofspace and masonry walls sealed . Plus junctions between walls, ceilings and floor .

Rainwater- 100mm half round upvc gutter fixed to fascia connected to 75mm dia. upvc rwp .Trapped at base with roddable gully . Connected using 100mm upvc pipe bedded in pea gravel 450 minimum below ground with minimum 1/40 gradient. Surface water drainage to be constructed and installed in accordance with BS EN 12056 - 3 : 2000.

Drainage/ Heating-All to the satisfaction of the Council . Heating by 'Gas Safe' registered engineer . TRV's to all new radiators . Lag all water and heating pipes with 20mm Kingspan Kooltherm pipe insulation, thermal conductivity 0.025W/m.K.

Mechanical Vent - 60 litres per second to kitchen exiting to the external atmosphere . Extract fan to have a specific fan power no greater than 0.5 W/1/s. With separate 12000 mm2 permavents to room.

Specifications				Client:	
	Scale:	No Scale		Project:	
		Date	Name	Single Storey Extension	
	drawn:	29-08-23	FMC	38 Balfron Road	
	checked:			Paisley PA1 3HD	
				Drawing-No.:	09