



**Side Elevation**

Kitchen: vaulted roof. Plenum clay low pitch plain tiles suitable for 20 degree roof pitch, 100mm headlap, all fixed in accordance with the manufacturer's instructions and to BS5534. All tiles to be mechanically fixed. 2 fixings to perimeter tiles. 50 x 25 sw treated battens on Kingspan Nivent felt. 150 x 50 sw rafters 400/c. Double rafters to trim velux. 100 x 50 wall plates strapped to blockwork. 100 Kingspan Kooltherm K107 insulation between rafters with min. 50 ventilation gap over insulation. 50 Kingspan insulation below rafters with foil taped joints. 12.5 plasterboard and skim ceiling. Ground Floor: Levelling screed on 100 concrete slab on 1000 gauge visqueen vapour barrier on 80mm Kingspan Kooltherm K103 insulation on 1200 gauge visqueen dpm to lap 150mm with dpc. 25mm sand bedding on minimum 150mm consolidated hardcore. Walls: (0:18 minimum U value) 102mm facing brick external leaf, 100mm cavity with 100mm Rockwool insulation full fill insulation, 100mm Thermadite Shield block internal leaf, 63mm insulated plasterboard and skim lining. Stainless steel Ancon RT2 wall ties, 22.5mm long, 600/c horizontally and 450/c vertically. Class B Engineering brickwork, below dpc level. Cavity fill to 75mm below ground level and min. 22.5mm below dpc level. 600mm x 22.5mm reinforced concrete foundations with B503 mesh reinforcement 50mm above base of foundation. Foundation soffit minimum 900mm below ground level and to levels indicated if Icelandic hedge retained.

Utility and Porch: Roof: Existing tiles, battens, felt and 125 x 50 rafters, 100 Kingspan Kooltherm K107 insulation between rafters with min. 50 ventilation gap over insulation. 50 Kingspan insulation below rafters with foil taped joints. 12.5 plasterboard and skim ceiling. Ground Floor: Levelling screed on 100 concrete slab on 1000 gauge visqueen vapour barrier on approx. 80mm Kingspan Kooltherm K103 insulation to raise floor level with house on 1200 gauge visqueen dpm to lap 150mm with dpc. On existing concrete slab. Walls: (0:18 minimum U value) existing brick external leaf, 50mm cavity, 100 x 50 sw studs, 400/c with 100mm Kingspan insulation between studs, 1000g visqueen vapour barrier, 12.5mm plasterboard and skim.

Straps: 30kg galvanised steel straps 1200 long at 1200/c to tie rafters, to parallel and supporting walls. Horizontal straps supported on timber joistings where perpendicular to the wall.

Eaves: pvc gutter on fascia, bargeboard and soffit system to match existing.

Drains below extension to be bedded and surrounded in 10mm single size gravel in accordance with manufacturer's instructions. Concrete lintels over drains where passing through walls and surround the drain in flexible material.

General Electrical: All electrical work to be installed and tested by a qualified and competent electrician to Approved Document P. BS 7671 certificate to be issued upon completion. Low energy light fittings throughout. Double socket outlets, light fittings and light switches as indicated. Mechanical extract ventilation to kitchen 60l/sec, utility 30l/sec.

Plumbing: 40mm pvc waste to sink, 15mm trap, hot tap on LHS of fittings.

Heating: Install new radiators as indicated of W-thermostatic radiator valves, sized to suit room heat loss.

Windows and doors: UPVC, double glazed, low E glass, 1.4 U value, 8000mm<sup>2</sup> middle vents (3 no. within 800mm of floor level).

