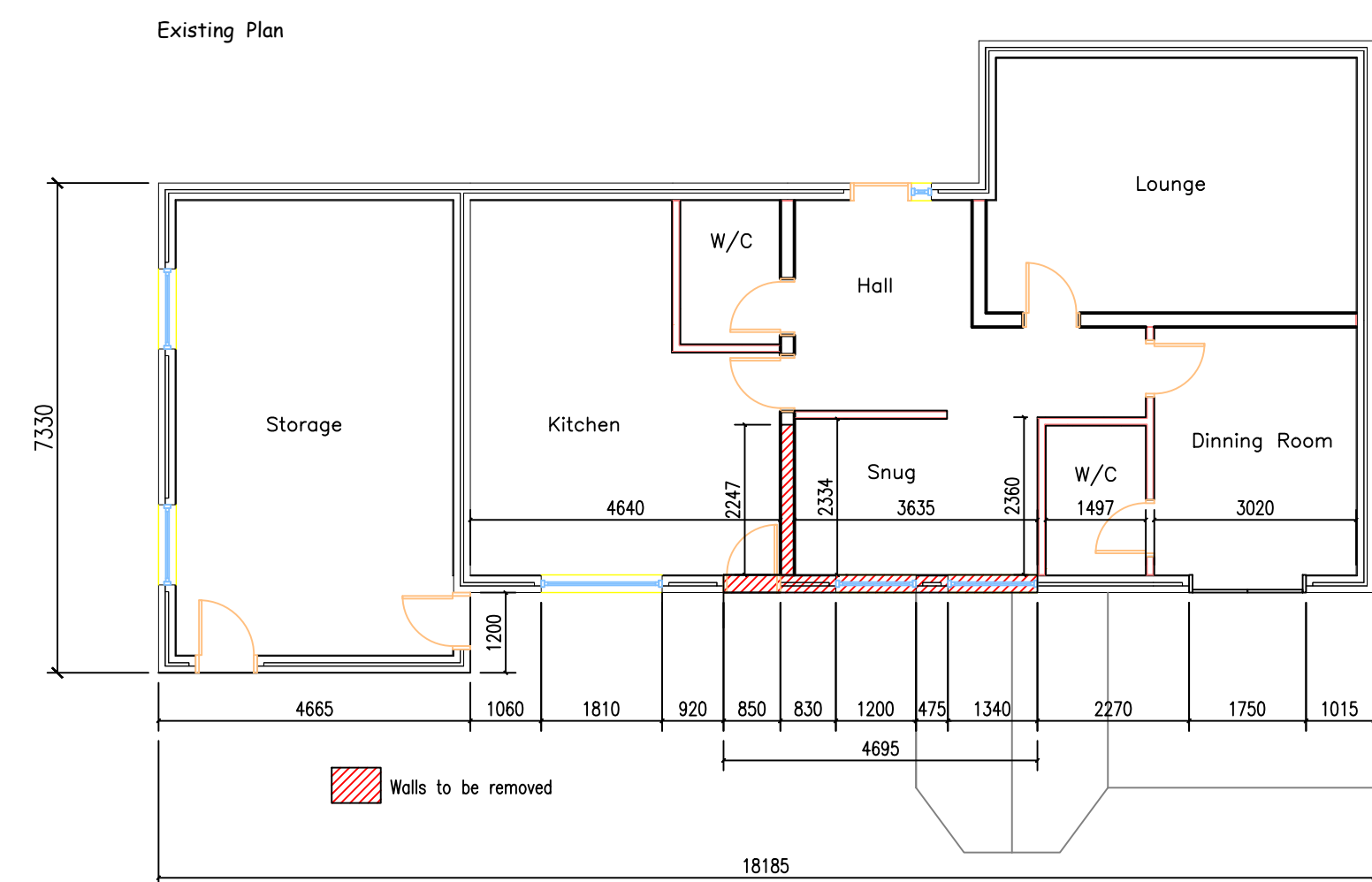
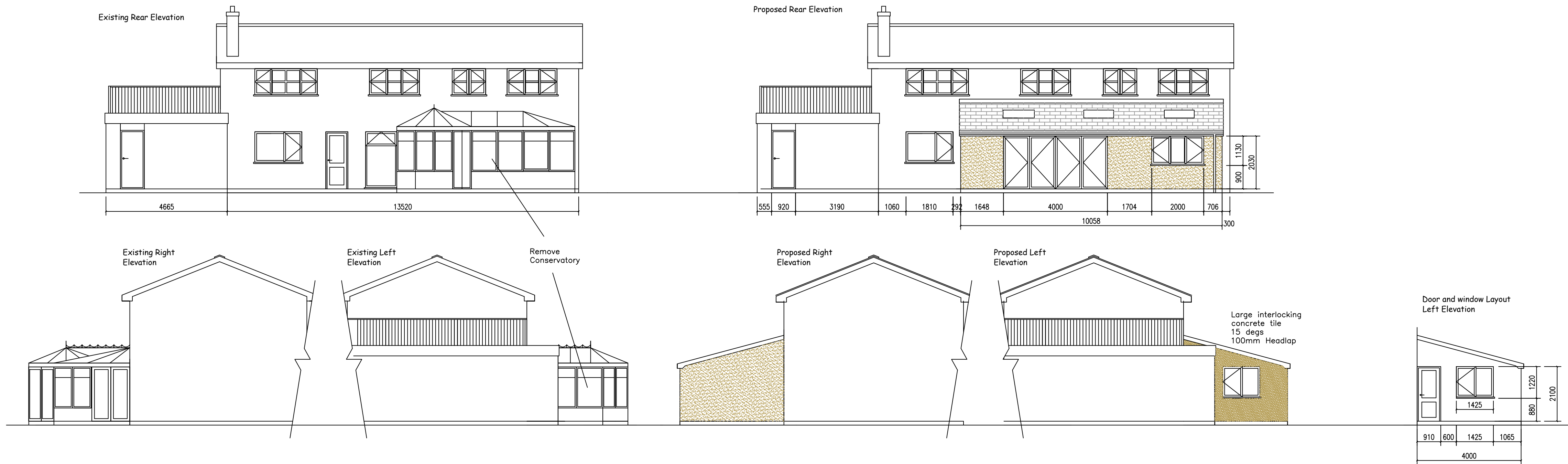
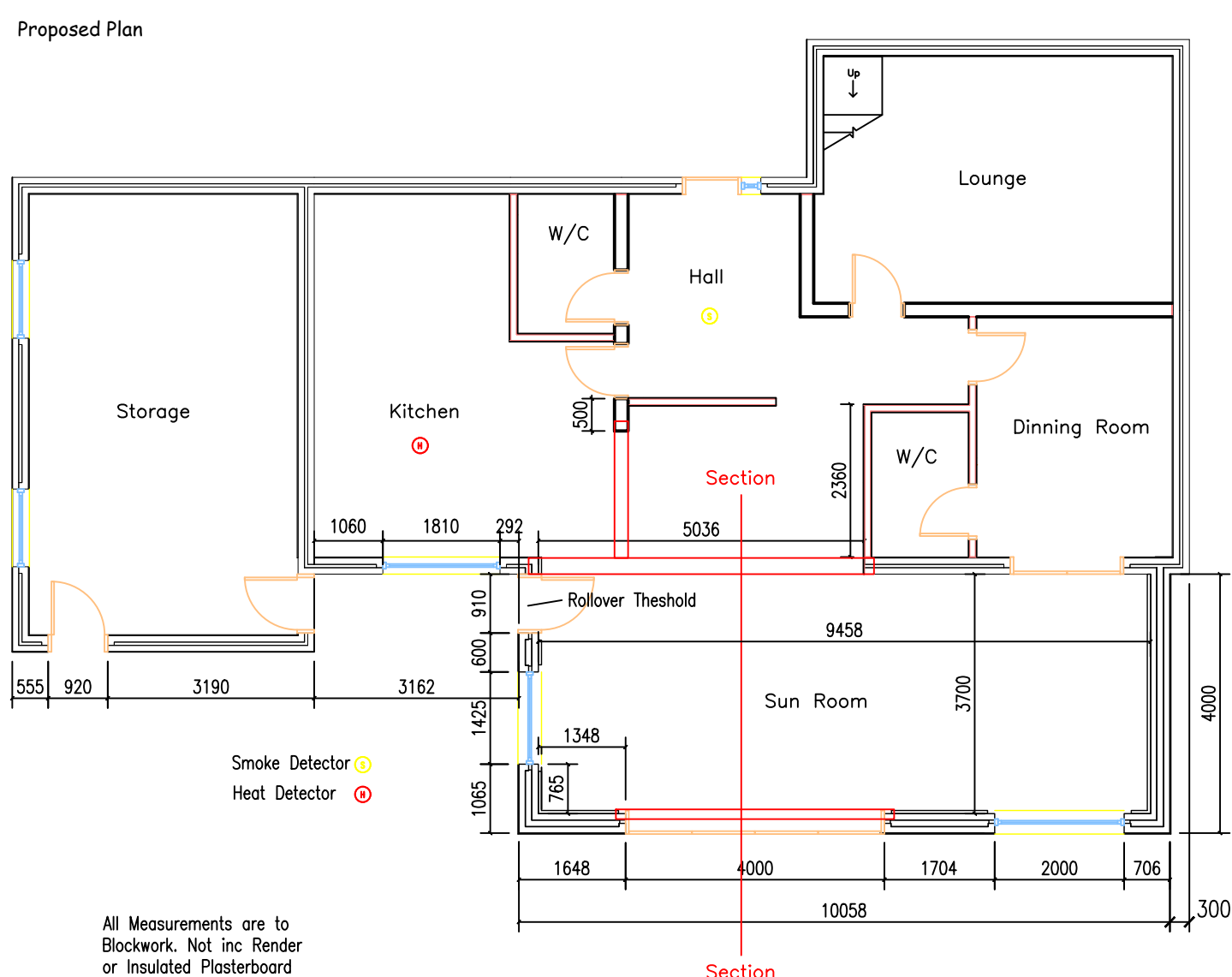
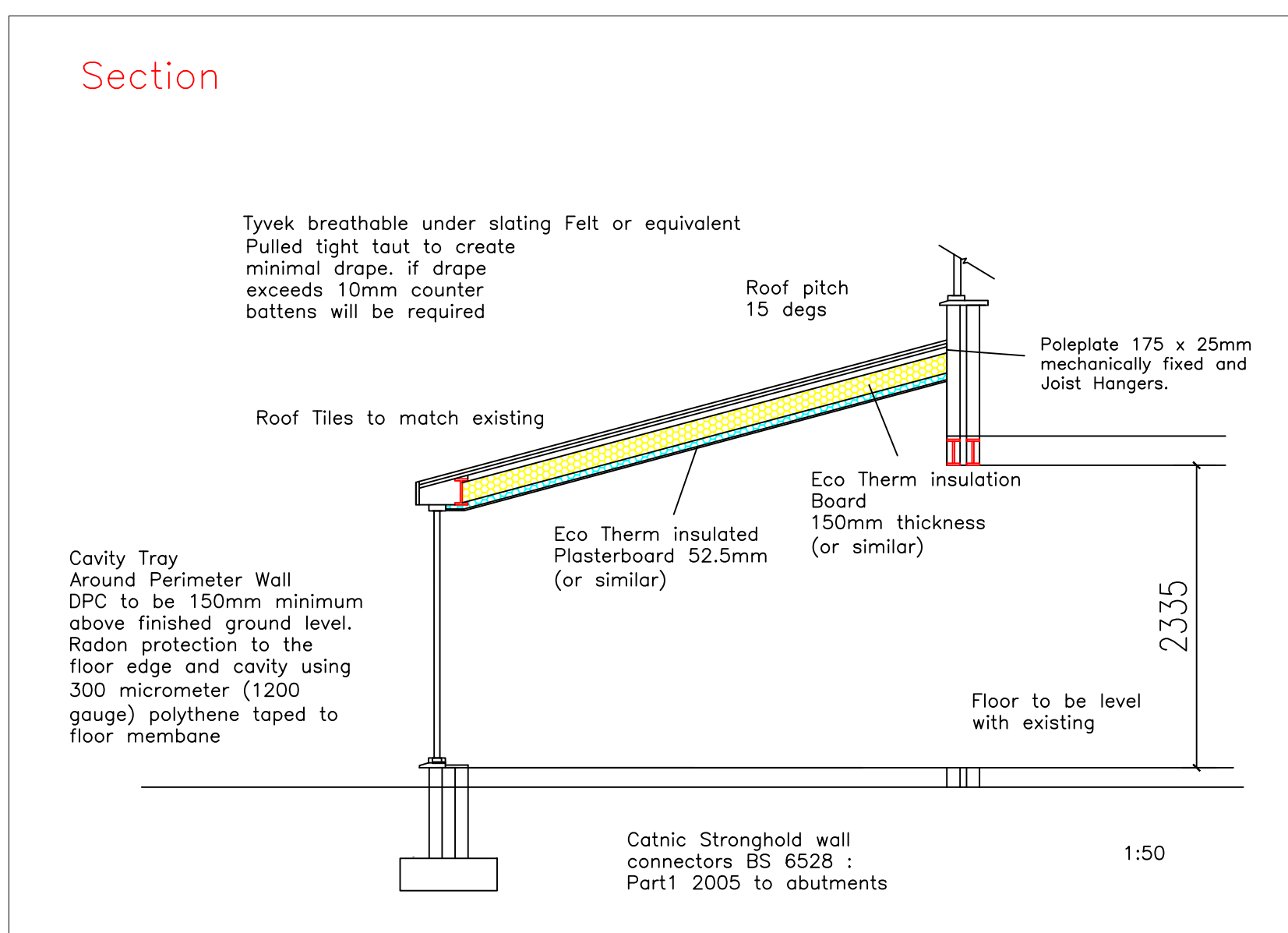
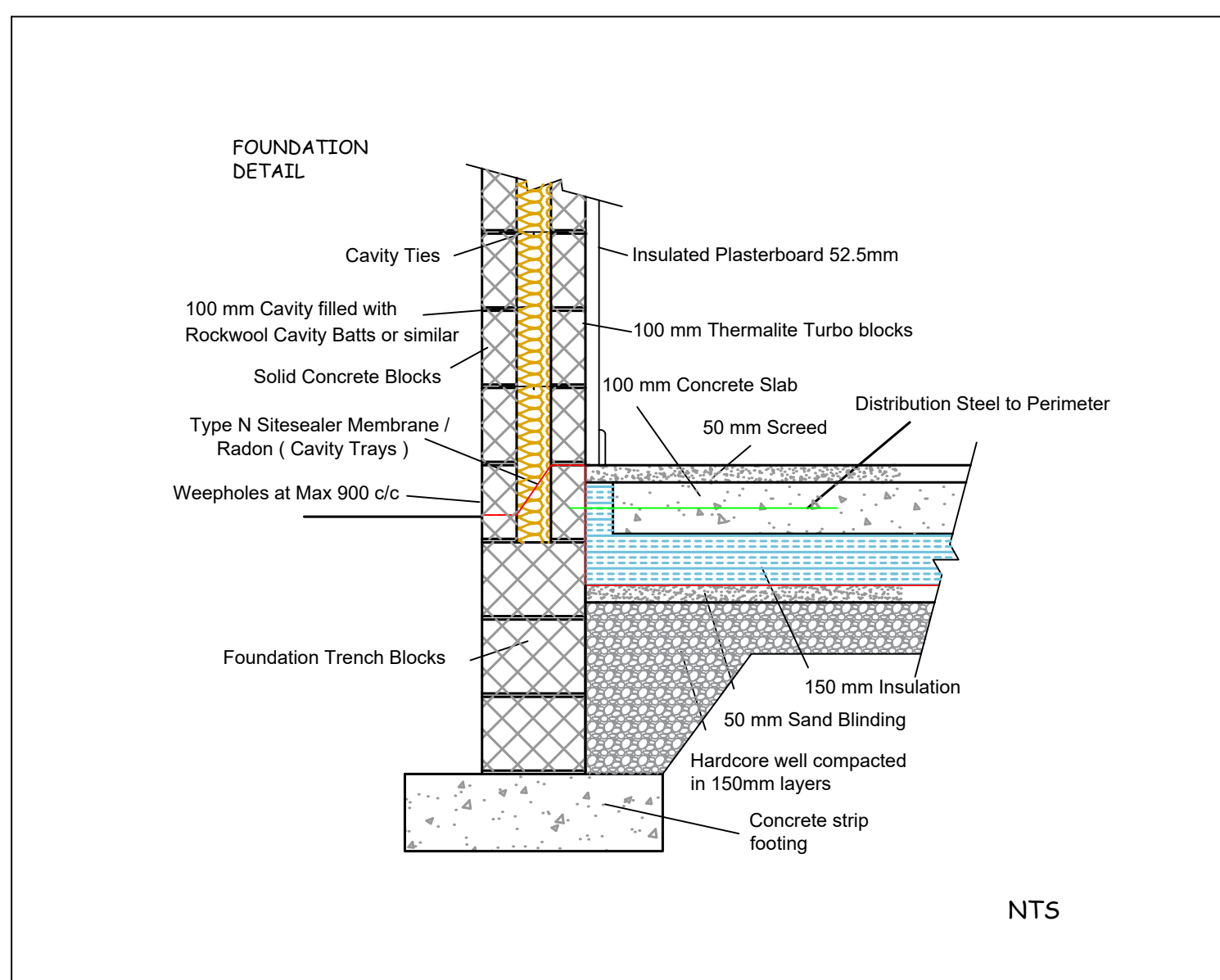
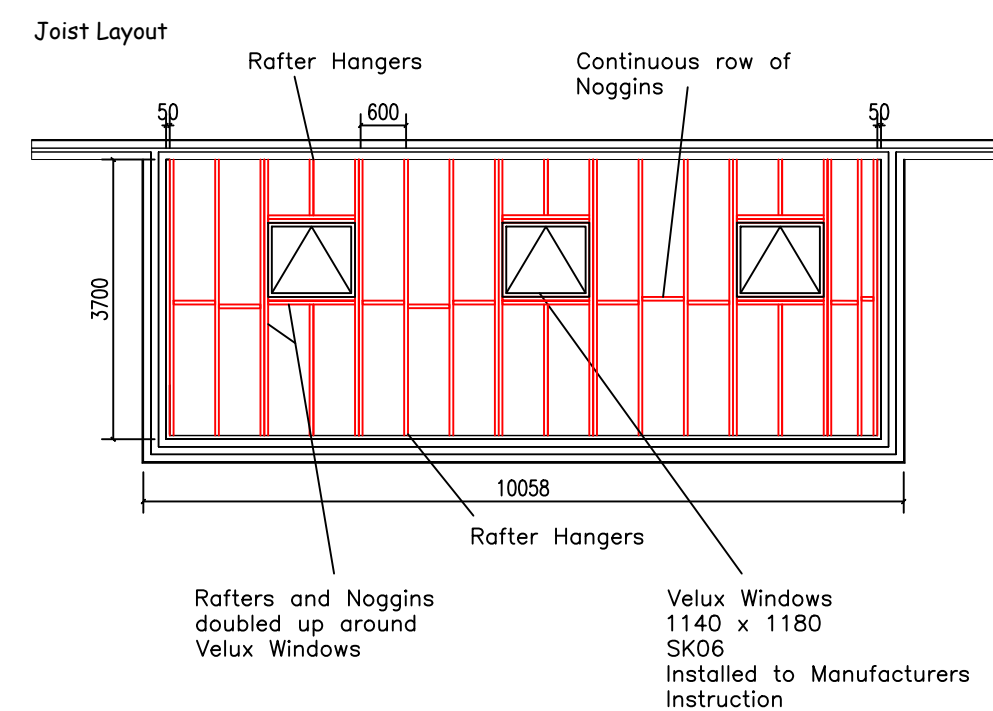




All Measurements to be checked on site, prior to start. Priority taken to Structural Engineers Specification.



All Measurements are to Blockwork, Not inc. Render or Insulated Plasterboard



#### Notes

##### Foundations

Concrete trench foundations to be taken down to adequate loadbearing level, min 800mm below ground level. If poor ground is located on site during excavation, contractor to contact Building Control for advice.

Foundations to external cavity walls to be 750 x 250mm Grade C30P concrete.

Radon barrier required and fitted to manufacturers instruction in accordance with B.S 211.

Radon Sump provided if required.

##### Floor Construction / Insulation

Hardcore compacted in max 150mm layers, 150mm K3 Kooltherm Floor Board insulation, Include perimeter insulation, avoiding cold bridging, (or equivalent), 100mm Concrete Slab, 50mm Screed, A series BRC reinforcement over drainage pipes, distribution steel to perimeter. ( See Foundation Detail Drawing)

##### Walls Below DPC

Construction comprising:-

Foundation Trench blocks to BS6073.

##### Walls above DPC

To be cavity construction comprising:-

External 300mm Cavity Wall, inner leaf 100mm Thermalite Turbo Block and outer leaf of 100mm dense aggregate concrete blocks suitable for render (Manufactures Details to be supplied to Building Control Officer if required), 100mm cavity to receive 75 K8 Kooltherm insulation or similar with 25mm unvented cavity, insulation to be taken below DPC level. Walls to receive 42.5mm insulated Plasterboard.

Contractor to ensure cavity is 100mm and free from mortar droppings.(Load bearing blocks shall be 7Nmm2, 450 x 225mm)

External wall to be rendered and painted.

Cavity ties to be Ancon Starfix RT2 General Purpose 250mm, spaced at 900mm centres horizontally and 450mm vertically, evenly distributed but NOT staggered with minimum 3.7 ties per square meter see installation guide attached. Ensure all ties have a minimum embedment of 50mm and at every block course around windows/doors. All cavities to be closed at reveals horizontally and vertically using blockwork, and incorporating DPC.

Catnic Stronghold Wall Connectors.

External Walls to be finished internally with 32.5mm insulated plaster board secured with bonding dabs as BS8212 : 1995 with 5mm skim finish.

##### Lintels / Beams

See Structural Engineers beam Calculations attached.

Lintels to external wall door and window openings to be hollow Standard Duty, pressed steel Catnic CG90/100 or similar approved, containing integral insulation. All Lintels to have a minimum 150mm end bearing.

Lintels to comply with both BS5977: part 2 :1983 and BS476: part 21:1987.

##### Cavity Trays

Cavity trays to be installed, lapped over lintels, rising minimum 150mm inside the cavity lapped into brickwork and projecting beyond the end of the lintel bearing point, with stop ends and weep holes if required. 150mm bearing.

##### Roof Construction

Tile colour to match existing, Interlocking large format tile 100mm lap required for 15 deg, on 44x25mm tanalised softwood battens. Tyvek (or similar) breathable under slating felt to BS 747. Underlay fixed to manufactures recommendation.

195 x 38mm Rafter (treated) to be clipped using rafter hangers, 600mm centers. Poleplate with mechanically fixed Galvanised Joist Hangers.

30 x 5 x 1200mm galvanised mild steel straps at max 2000mm centres, plugged and screwed to wall at Gables, tied back to trusses with noggins beneath and packers between truss and wall. Roof to provide one row of noggins mid span. Provide 300 x 400mm x 6mm eaves trays to support Tyvec breathable felt at fascia.

Lead flashings to external abutments to BS EN 12588: 2006 & BS 6915. Patination Oil.

##### Roof Ventilation

Roof ventilation: Roof to have open ventilation breathable sarking felt.

##### Heating

Radiators to be extended from existing gas boiler. Gas safe Registered Engineer.

##### Room ventilation

To be provided by controllable trickle vents in each window providing 8000mm2 of free air space to each habitable room.

Mechanical ventilation to existing kitchen, bathroom / WCs is to be in accordance with Part F1 Building Regulations 2000. 30 Ltrs / sec and a 15 min overrun is to be provided for bathrooms, connected to the light switch.

##### Rainwater Goods:-

112mm diam square pvcu (to match existing)

Facia brackets should not exceed 1M centres and be fixed with 2no zinc plated or sherardised 1" x 10g screws. all angles, outlets and stopends to have facia brackets with 150mm on each side. down pipes to have clips at every socket and intermediate clips at 1800mm, all clips to be fixed with 2no 2" screws as above. allow 10mm expansion joint within sockets. all downpipes to discharge into roddable gullies, leading to existing surface water drains.

Ground percolation test results to be forwarded to Building Control.

##### Doors and Windows

All new windows to be secure by design compliant. UPVC with full double glazing. Ventilation to be provided by controllable trickle vents in each window providing 8000mm2 of free air space to each new habitable room. Toughened Safety Glass to BS6206 : 1981 to windows within 300mm of doors and 1500mm off finished floor level. All 1st floor rooms to have fire escape windows, at least 450 x 750 openings all window cill heights to be 900mm from finished floor level. Double glazed units 20mm with Low E - argon filled. Upvc Frame 0.13 W/m2k. W/c and bathroom to have obscure glazing.

All door and window openings are to be closed with thermabate 100mm insulated combined DPC and cavity closers fitted to the full perimeter of the reveal so as to prevent cold bridging.

Ground floor door openings to provide a minimum clear width of 800mm.

External doors to provide minimum 775 clear width.

All doors and windows to be mechanically fixed to BS Publication PAS24:2016.

##### Smoke Alarms

Mains powered self contained smoke alarms will be fitted to ground floor hall and first floor landing level within 7.5m of habitable rooms, the units will be linked to operate simultaneously. Heat detector to be fitted in kitchen.

##### Electrical Installation

New Light fittings to extension to be an energy efficient type: one per 25m2 of floor area or one per four fixed lighting fittings.

An Electrical Installation Certificate will be provided in accordance with BS 7671 : 2001 complying with Part P of Building Regulations for domestic installation work, provided by the person responsible for carrying out the works, design, construction, inspection and testing. ie. NICEIC, NAPIT, ELECSA etc.

All new sockets to be 450mm from finished floor level and switches at 1200mm from finished floor level.

Provide adequate external lighting to door openings.

Address: 5 Willow Court  
Bangor on Dee  
Wrexham

Detail: Elevations, Plans, Section, Foundation Detail,  
Joist Layout

Scale: 1:100