



**Concrete Strip Footing** to be minimum 600 x 1000mm deep GEN 1 Concrete to BS 8500-2. Top of foundation to be minimum of 450mm below external dpc. Foundations are to be constructed to the complete satisfaction of the Building control and structural engineer (if required). Trench to be down onto a good load bearing strata.

**In-Situ Floor Slab** (UValue <0.21w/m²k) consisting of :-  
 - 150mm well compacted hardcore and sand blinding.  
 - ICOPAL RMB400 or similar approved radon barrier to be laid under insulation and lapped up walls and sealed with DPC to wall strictly in accordance with manufacturers specification and details.- 150mm Concrete Floor Slab - 200mm XTRATHERM SR/UF insulation and edge strip to give min U Value of 0.2 W/m²k.  
 - 1900 gauge polythene isolation layer on top of insulation turned up minimum 100mm at perimeter to finish behind skirting  
 - 50mm LAFARGE AGILIA SCREED A XTR Anydrite Floor Screed or similar approved concrete floor screed in accordance with manufacturers specification.  
 - Floor finish, to be agreed and to be laid strictly in accordance with manufactures instructions.

**Insulated concrete roof deck to En-Suite** consisting of :-  
 - Hollow core concrete floor planks as manufacturers specification and details,  
 - Pitch mastic tanking strictly as manufactures specification to consist of:-  
 - Black Sheathing felt and 20mm two coat polymer modified mastic asphalt roofing.  
 - 150mm well compacted Geocell Foam Glass aggregate.  
 - Tarmac topping to consist of 70mm well compacted sub base and 30mm wearing course.

**Brick clad insulated cavity wall type A** - (UValue < 0.18 W/ m²k) consisting of :-  
 - 100mm FL Grade external blue brickwork.  
 - 175mm Cavity to be partially filled with 150mm Thin-R Partial Fill Cavity Wall Plus XT/CWP and 25mm SURECAV25 25mm cavity liner or similar approved. Insulation to be fitted as wall is built. Cavity to be clear of debris and snots and insulation fitted tightly without gaps.  
 - Below DPC cavity to be fully filled with POLYFOAM or similar approved XPS insulation. Fitted tightly in cavity and top chamfered towards external leaf.  
 - 100mm FIBOLITE or similar approved, concrete blockwork internal skin.  
 - Walls to be finished with wet plaster. Wet plaster forms air tightness layer. **If wet plaster omitted for board and skim then alternative air tightness measures will be required.**  
 - RUBBEROID or similar approved servitized DPC to be fitted minimum 150mm above finished external ground level. Cavity tray to be fitted sloping outwards to internal DPC in next corresponding horizontal joint. Floor DPM to be taken up blockwork and lapped with internal DPC.  
 - Stainless steel wall ties to BS 1243 DD 140 or BS EN 845-1. With minimum 50mm embedment Horizontal spacing of 900mm and vertical spacing of 450mm.  
 - THERMABATE or similar approved insulated cavity closers to be used to all openings.  
 - Gable walls should be strapped to roof with stainless steel tension straps at not more than 2m centres all to comply with Building Regs Part A.  
 - Lintels to be Catnic CG 1500/100 Insulated Lintel or similar approved with min 150mm bearing at the ends.

**Internal Stud Partitions** consisting of :-  
 - 55x75 sw treated studwork at 600 c/cs with noggin to suit.  
 - 12mm WBP plywood screw fixed to both sides of timber studs.  
 - 12.5mm plasterboards with integral vapour barrier to both sides screw fixed to 50x75.  
 - WEDI board or similar approved to be used to en-suite and bathrooms  
 - BRITISH GYPSUM Acoustic ISOWOOL Insulation fitted in void as manufacturers instructions.  
 - Lightweight plaster skim to both sides.

**Stairs**  
 - Stairs to be in accordance with Part K of the Building Regulations.  
 - For stepped change of level within entrance level of dwellings stairs to be minimum of 900mm wide.  
 - Maximum Rise 220mm, minimum going 220mm with a maximum pitch of 42degrees, any rise between 155mm and 220mm used with any going between 245mm and 260mm. Any rise between 165mm and 200mm used with any going between 223mm and 300mm.  
 - Open treads to be protected to prevent a 100mm diameter sphere from passing through.  
 - Tapered treads should have min 50mm width at narrow end and the going should not be less than the going of the straight flight, measured at centre point as Diagram 1.8, Part K of Building Regs.  
 - Headroom should be minimum of 2m or for loft conversions minimum of 1.8m at edge and 1.9m at centre of stairs.  
 - Handrails to 1 side if less than 1m wide or to both sides if over 1m wide. Height between 900mm and 1000mm to top of handrail from pitch line or floor.  
 - Guarding to stairs to be 900mm high, guarding to landings and balconies to be 1100mm high and be such as; - ensure that a 100mm sphere cannot pass through any openings in the guarding and avoid horizontal rails to avoid it being climbable.  
 - Stairs to comply with Part K of the Building regulations.

**Truss Roof Construction insulation at rafter level** to consist of :-  
 - Clay plain tiles fitted strictly in accordance with manufactures specification and details.  
 - 25x50 tanalized battens and **counter battens** nailed with stainless steel nails to rafters. **Counter battens MUST be used to provide 25mm ventilation space.**  
 - TYVEK SUPRO breather membrane or similar approved breathable roof membrane.  
 - Truss rafters sized by manufacturer,  
 - Minimum 150mm XTRATHERM Thin R Pitched roof XT/PR insulation to be fitted between and under truss rafters to slope of roof in accordance with manufactures recommendations and instructions.  
 - 12mm OSB screwfixed to underside of roof trusses. All joints to be taped with INTELLPRO air tightness tape or similar approved, **not duct tape.** Any and all penetration to be made good.  
 - Ceilings to consist of metal frame suspended ceiling with 100mm service void finished with plasterboard and skim.  
 - 100 x 75 C24 sw wall plate fixed to top of inner wall at 1200mm centres and every half joint with galvanized wall plate straps. Rafters birdsmouthed over wall plate. Birdsmouth a maximum of 1/3 depth of rafter.  
 - First 3 trusses running parallel to the gable wall are to be strapped to the gable wall with proprietary galvanized horizontal restraint straps at min 1800mm c/cs

**Dry lining to all existing walls** consisting of :-  
 - 50x50 sw battens at 600 c/cs screwfixed to existing blockwork walls.  
 - 12.5mm FERMACELL Fibre gypsum board  
 - Void between studs to be fully filled with KNAUF DRITHERM ULTIMATE 32 mineral wool or similar approved.

**Stone clad insulated cavity wall type B** - (UValue < 0.18 W/ m²k) consisting of :-  
 - 100mm Random dressed stone.  
 - 175mm Cavity to be partially filled with 150mm Thin-R Partial Fill Cavity Wall Plus XT/CWP and 25mm SURECAV25 25mm cavity liner or similar approved. Insulation to be fitted as wall is built. Cavity to be clear of debris and snots and insulation fitted tightly without gaps.  
 - Below DPC cavity to be fully filled with POLYFOAM or similar approved XPS insulation. Fitted tightly in cavity and top chamfered towards external leaf.  
 - 100mm FIBOLITE or similar approved, concrete blockwork internal skin.  
 - Walls to be finished with wet plaster. Wet plaster forms air tightness layer. **If wet plaster omitted for board and skim then alternative air tightness measures will be required.**  
 - RUBBEROID or similar approved servitized DPC to be fitted minimum 150mm above finished external ground level. Cavity tray to be fitted sloping outwards to internal DPC in next corresponding horizontal joint. Floor DPM to be taken up blockwork and lapped with internal DPC.  
 - Stainless steel wall ties to BS 1243 DD 140 or BS EN 845-1. With minimum 50mm embedment Horizontal spacing of 900mm and vertical spacing of 450mm.  
 - THERMABATE or similar approved insulated cavity closers to be used to all openings.  
 - Gable walls should be strapped to roof with stainless steel tension straps at not more than 2m centres all to comply with Building Regs Part A.  
 - Lintels to be Catnic CG 1500/100 Insulated Lintel or similar approved with min 150mm bearing at the ends.

**Rendered insulated cavity wall type C** - (UValue < 0.18 W/ m²k) consisting of :-  
 - Proprietary render system and accessories on 100mm blockwork strictly as render manufactures specification and details.  
 - 175mm Cavity to be partially filled with 150mm Thin-R Partial Fill Cavity Wall Plus XT/CWP and 25mm SURECAV25 25mm cavity liner or similar approved. Insulation to be fitted as wall is built. Cavity to be clear of debris and snots and insulation fitted tightly without gaps.  
 - Below DPC cavity to be fully filled with POLYFOAM or similar approved XPS insulation. Fitted tightly in cavity and top chamfered towards external leaf.  
 - 100mm FIBOLITE or similar approved, concrete blockwork internal skin.  
 - Walls to be finished with wet plaster. Wet plaster forms air tightness layer. **If wet plaster omitted for board and skim then alternative air tightness measures will be required.**  
 - RUBBEROID or similar approved servitized DPC to be fitted minimum 150mm above finished external ground level. Cavity tray to be fitted sloping outwards to internal DPC in next corresponding horizontal joint. Floor DPM to be taken up blockwork and lapped with internal DPC.  
 - Stainless steel wall ties to BS 1243 DD 140 or BS EN 845-1. With minimum 50mm embedment Horizontal spacing of 900mm and vertical spacing of 450mm.  
 - THERMABATE or similar approved insulated cavity closers to be used to all openings.  
 - Gable walls should be strapped to roof with stainless steel tension straps at not more than 2m centres all to comply with Building Regs Part A.  
 - Lintels to be Catnic CG 1500/100 Insulated Lintel or similar approved with min 150mm bearing at the ends.

**Cut Roof Construction to porch insulation at rafter level** to consist of :-  
 - Clay plain tiles fitted strictly in accordance with manufactures specification and details.  
 - 25x50 tanalized battens and **counter battens** nailed with stainless steel nails to rafters. **Counter battens MUST be used to provide 25mm ventilation space.**  
 - TYVEK SUPRO breather membrane or similar approved breathable roof membrane.  
 - 100x75 C24 rafters at 400c/cs  
 - Minimum 150mm XTRATHERM Thin R Pitched roof XT/PR insulation to be fitted between and under truss rafters to slope of roof in accordance with manufactures recommendations and instructions.  
 - 1000 gauge vapour check barrier stapled adn taped with INTELLPRO air tightness tape or similar approved, **not duct tape** to underside of trusses. Any and all penetration to be made good. Ceilings to be finished with plasterboard and skim.  
 - 100 x 75 C24 sw wall plate fixed to top of inner wall at 1200mm centres and every half joint with galvanized wall plate straps. Rafters birdsmouthed over wall plate. Birdsmouth a maximum of 1/3 depth of rafter.  
 - First 3 trusses running parallel to the gable wall are to be strapped to the gable wall with proprietary galvanized horizontal restraint straps at min 1800mm c/cs

**Beam and Block First Floor** consisting of :-  
 - Concrete Beam and block floor system. To be fitted strictly in accordance with manufactures specification, details and drawings.  
 - 100mm XTRATHERM SR/UF insulation and edge strip With min 25mm perimeter insulation to be fitted BEFORE floor insulation and to run from beam and block floor slabs up to top of floor slab.  
 - 1900 gauge VISQUEEN ECOMEMBRANE polythene isolation layer on top of insulation turned up minimum 100mm at perimeter to finish behind skirting  
 - 50mm LAFARGE AGILIA SCREED A XTR Anydrite Floor Screed or similar approved concrete floor screed in accordance with manufactures specification.- Floor finish, to be agreed and to be laid strictly in accordance with manufactures instructions. MC to ensure levels of proposed and existing floor levels match exactly.

**Windows and Glazing** consisting of :-  
 - All new windows to be double glazed units with minimum U Value of 1.6W/ m²k. With K Glass to internal pan  
 - All glazing below 800mm and 1500mm to doors or within 300mm of door reveal to be Laminated Safety Glazing in accordance with Building Regs part K.  
 - New windows to first floor bedrooms with fill under 4.5m above external ground level to have an escapable window. To be minimum of 450 x 450 and with a minimal openable area equivalent to 0.33m². The bottom of the openable area should not be more than 1100mm above floor in accordance with Building Regs part B1.  
 - Windows with Cill heights of 800mm or less to be fitted with egress hinges with restrictors.  
 - At least one of the existing first floor windows should be an escape window if not already.  
 - Ground floor, basement and other easily accessible windows (including easily accessible rooflights) should be secure windows in accordance with Approved Document Part Q.



2-2

Building Section E-W

1:20

Red line is air tightness layer for roof - 19mm OSB screwfixed to underside of roof trusses and projection to eaves. All joints and penetrations to be taped. Plaster to walls to be taken up to and taped to OSB. Proprietary air tightness tape as notes opposite to be used **NOT DUCT TAPE.**

Insulated plain clay tile truss roof as notes opposite and manufactures specification

Supply and fit aluminium composite double glazed windows and doors as notes opposite

Form rendered wall, wall type C. As notes opposite and manufactures specification

Insulated beam and block floor floor as notes opposite and manufactures specification and details. With underfloor heating as manufactures details.

Plaster to form air tightness layer. Parge coat of plaster to floor and ceiling void and around end of floor beams to ensure air tightness

Supply and fit aluminium composite double glazed windows and doors as notes opposite

Form new Insulated raft foundation with brick plinth in accordance with manufactures instructions and S Engineer specification

D	Amend notes	date	28/6/23
C	Amend stone cladding notes	date	25/4/22
B	Amend construction	date	16/11/21
A	Amend layout	date	13/7/21
rev	details	by	date

Project  
 Vaughan  
 Willow Bank  
 Kniveton

Drawing Name  
 Proposed Section 2-2

Drawn by  
 cta  
 Date  
 May '21

Project No.  
 2019  
 Drawing Scale  
 1:20

Layout ID  
 23D  
 Status  
 Construction

Original produced at A1 (841x594) DO NOT SCALE not to reproduce with out written permission of Channel Design Ltd.