

General Notes

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This drawing has received Planning approval dated:

This drawing has received Building Regulations approval dated:

WARM ROOF AND ATTIC TRUSS PLANT ROOM

Roof Construction — Target U-value 0.11 W/m²K
Double Roman concrete tiles on 38x25mm treated tile battens. 38x50mm counter-battens fixed through insulation into rafters using Insosafe helical fixings. 50mm PIR (λ=0.022) continuous over rafters. 150mm PIR friction-fitted between rafters. High-performance breathable membrane (Tyvek Supro or equivalent) lapped into gutters. 12.5mm foil-backed Gyproc FireLine plasterboard to underside — all joints and perimeters taped for airtightness.

Eaves Detail — 150mm Fascia / 225mm Soffit
Stop 50mm over-rafter PIR at wall plate. Timber tilting fillets to transition height to 150mm fascia. 10mm continuous over-fascia vent. Rigid Eaves Protection Member to prevent membrane ponding.

Attic Trusses — 7.5m Span / 28.2° Pitch
Attic trusses at 400mm centres, C24 timber, minimum 225mm bottom chords. Floor: 22mm P5 MR chipboard with 12mm A1 Fibre Cement Board overlay in plant zone. 100mm mineral wool (minimum 10kg/m³) in-fill for acoustic and fire damping. Ceiling below: 2 layers 12.5mm FireLine plasterboard with staggered joints — 60-minute fire resistance. MVHR and ASHP plant units on 18mm plywood patress with anti-vibration mounts. Fire collars to all floor penetrations.

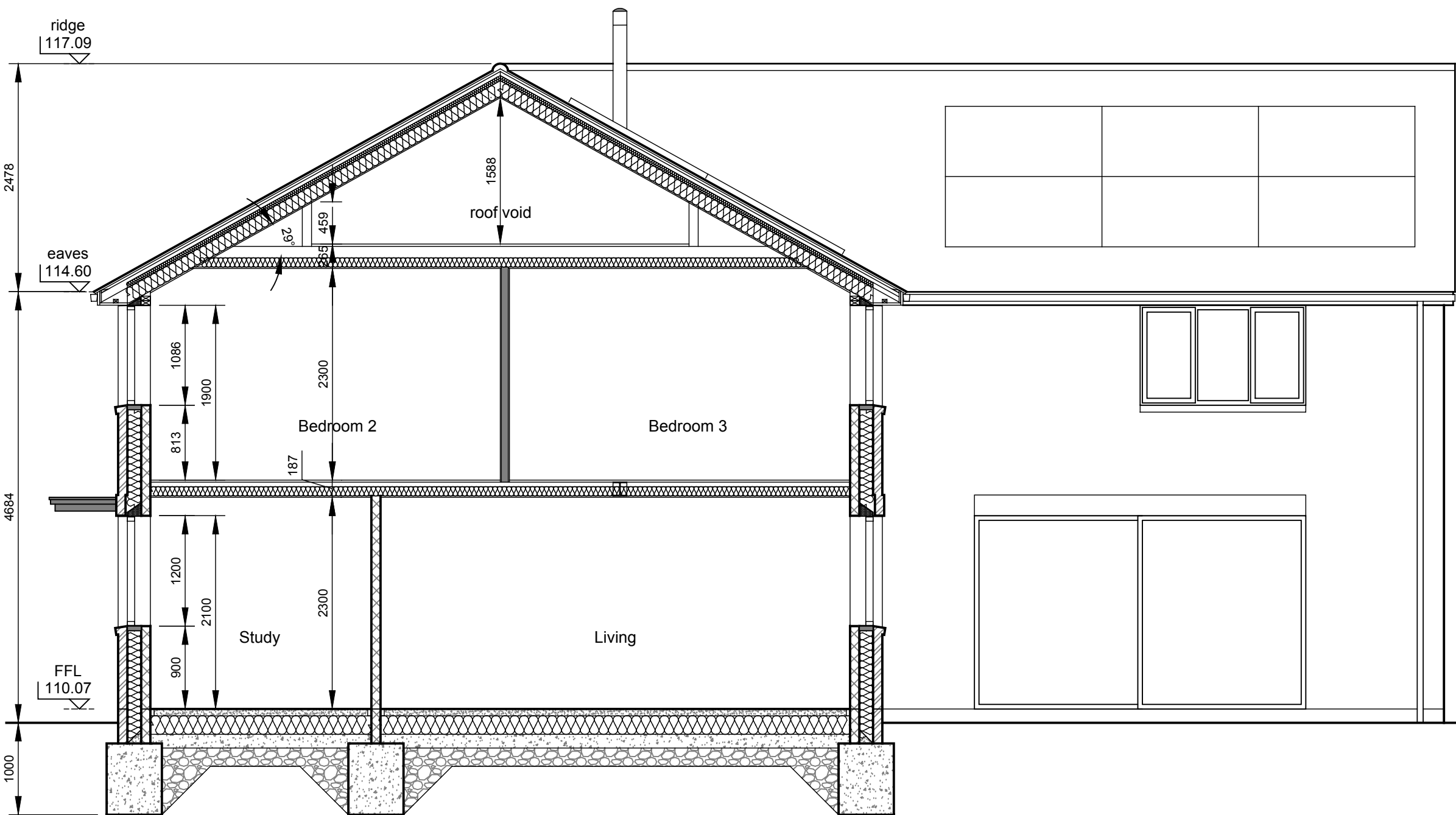
Thermal Bridging — Junction E10
Target Ψ ≤ 0.05 W/mK. Cavity wall insulation to meet underside of roof insulation for continuous thermal wrap. Airtightness sealant at all rafter/wall plate junctions.

EXTERNAL WALL CONSTRUCTION

— Target U-value 0.14 W/m²K
Facing brick outer leaf as drawing notes — see Front Elevation Design Intent. 150mm cavity full-fill mineral wool or semi-rigid insulation batts, λ=0.034 or better, friction-fitted full width, no gaps. Stainless steel low-conductivity wall ties (Teplo BioTech or equivalent) at 600mm horizontal x 450mm vertical centres, length to suit 150mm cavity. 100mm dense concrete block inner leaf 7.3N/mm² minimum. 12.5mm Gyproc Wallboard on dabs internally. All joints taped for airtightness. Insulated cavity closer to all window and door reveals. Cavity closed at all openings, junctions and eaves. DPC at base of wall lapped with ground floor DPM. Weep holes at 1000mm centres to base course of outer leaf. Continuous insulation wrap between wall and roof insulation — see roof construction note. All junctions and openings to achieve Ψ-values in accordance with BRE IP 1/06 Accredited Construction Details or better.

GROUND FLOOR CONSTRUCTION

— Target U-value 0.11 W/m²K
150mm concrete ground bearing slab on 200mm compacted hardcore blinding. 200mm PIR insulation (λ=0.022) in two layers of 100mm with staggered joints laid below slab. 1200 gauge polythene DPM lapped and sealed to wall DPC. 75mm sand/cement screed over underfloor heating pipework — screed specification and minimum cover to UFH pipes to be confirmed by UFH contractor. All insulation joints taped. Insulation to be continuous to wall insulation with no thermal bridge at perimeter — insulated edge strip to perimeter of slab. Radon precautions if required by site investigation — to be confirmed.



Proposed Section

FIRST FLOOR CONSTRUCTION

47 x 150mm C24 graded timber joists at 400mm centres throughout. Minimum 90mm masonry bearing or approved joist hangers. One row solid timber bridging at mid-span. 30 x 5mm galvanised steel tension straps at maximum 2m centres where parallel to walls, fixed over minimum 3 joists with solid blocking. Double-up joists bolted at 600mm centres to all stair openings — heavy-duty joist hangers to all trimmer connections. 100mm mineral wool quilt (minimum 10kg/m³) between joists for acoustic and Part E compliance. 22mm P5 moisture-resistant chipboard decking, glued and screwed. Notching and drilling strictly per BS 5268-7.1 — no notches in middle 50% of span. 12.5mm fire-rated plasterboard ceiling taped and filled — 30-minute fire resistance.

Mid-Span Beams — Kitchen and Living Room

Steel or glulam mid-span beam to kitchen spanning 4.0m across shorter width, reducing joist span to 3.45m each side. Steel or glulam mid-span beam to living room spanning 3.9m across shorter width, reducing joist span to approximately 2.55m each side. Both beams to be flush with underside of joists — no downstand below ceiling line. Beams to be supported on padstones on structural walls below — positions shown on drawings. Make, size and specification of all beams and padstones to be confirmed by structural engineer prior to commencement.

Underfloor Heating — First Floor

Low-profile dry overlay UFH system on top of structural deck — aluminium heat diffuser spreader plates in pre-routed insulated panel boards (Wundafloor, Polypipe Overlay, Warmup or equivalent). System depth approximately 15–18mm. 18mm moisture-resistant chipboard overlay or tile backer board over UFH panels depending on floor finish. Total UFH build-up approximately 35–40mm above structural deck. Wet screed not to be used on timber joist construction. UFH design, layout and zone schedule to be confirmed by UFH contractor in coordination with architect prior to commencement.

WINDOWS

— Target U-value 0.8–1.0 W/m²K overall
Triple glazed white uPVC casement windows throughout. Minimum overall window U-value 0.8 W/m²K. Triple glazed unit: warm edge spacer bar, argon or krypton fill, low-e coating to inner and outer panes — minimum centre pane U-value 0.5 W/m²K. No glazing bars. No fanlights. Square section frames. Bathroom window obscure glazed, fixed light or top-hung restricted opening only. All units to comply with Part L and Approved Document Q security requirements. BFRC energy rating Band A minimum.

LARGE FORMAT SLIDING DOORS

— Target U-value 0.8–1.0 W/m²K overall
Triple glazed thermally broken aluminium sliding or bifold doors — kitchen/dining opening 3.6m wide. Minimum overall door U-value 0.8–1.0 W/m²K. Thermally broken aluminium frame with polyamide thermal break. Triple glazed unit with warm edge spacer, argon or krypton fill, low-e coating. Manufacturer to be confirmed — Schuco, Reynaers, Origin or equivalent approved. All units to comply with Part L and Approved Document Q. Threshold detail to be low or zero threshold suitable for underfloor heating — confirm with UFH contractor that threshold detail does not create cold bridge at floor perimeter.

FRONT DOOR

— Target U-value 1.0 W/m²K or better
Modern composite door, flush flat panel face, anthracite grey finish (RAL 7016 or equivalent). Single narrow full-height vertical glazed panel with triple glazed unit, black aluminium bead. Thermally broken frame. Minimum overall door U-value 1.0 W/m²K. Black lever handle and black letterbox. 840mm wide x 2100mm high. Approved Document Q compliant.

No. Revisions Date

Client
MR N HIBBS

Project
PROPOSED NEW DWELLING
LAND ADJACENT TO
35 BEAULIEU ROAD
AMESBURY
SP4 7PD

Drawing Title
PROPOSED SECTION



DALE ROBERTS DESIGN
ARCHITECTURAL SERVICES

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