

Project Title:

21 Seaward Drive,
Wokingham, RG40 5AS

Drawing Title:

Sections

DO NOT SCALE FROM THIS DRAWING

Scale @ A2:

1 : 50

Date drawn:

27.09.24

Drawn by:

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Revisions:

- A Revised for Reduced Design
B Revised for original design plus larger gym
C Reduced Design (reverted to original)
D All new external walls changed to brickwork finish

- ROOFS
- Roofing tiles to be agreed with Local Authority on treated SW battens to manufacture's recommendation over 1yr/ek sarking felt. Purpose-made valley tiles.
 - Cut roof to structural engineer design.
 - 100x50mm treated SW wall plates strapped to walls with 30x5mm galvanised M.S. anchors at 2000mm max Ctrs.
 - Rafters and ceiling joists strapped to walls with 30x5mm galvanised M.S. Anchors at 2000mm max Ctrs.
 - 100mm diameter half round plastic gutters supported on bracket fixed to 19mm and 65mm diameter RWP's.
 - Code 4 Lead Flashing at junctions of roofs and walls with DPC and Stepped DPC in brickwork and cavity tray.

- WALLS
- EXTERNAL BRICK WALLS:
103mm Facing Brickwork
150mm cavity fully filled with Dritherm 32
100mm block inner leaf (Celcon Standard)
15mm two coat plaster finish
Stainless steel wall ties at 750mm Ctrs and staggered at 450mm vertical
Ctrs. 225mm Ctrs adjacent to openings.
 - INTERNAL BLOCK WALLS:
100mm blockwork
13mm two coat plaster finish.
 - INTERNAL STUD WALLS:
97x47mm studs at 400mm Ctrs
10kg/m³ glass fibre sound insulation between.
12.5mm plasterboard each side
Skim coat plaster finish.

- OPENINGS
- Bitlsey or similar galvanised M.S. Insulated lintels over openings with 150mm min end bearing, cavity trays with return ends over and weep holes through brickwork.
 - Thermabate or similar insulated cavity closer at openings.
 - Double glazed windows with 16mm air gap and soft low E coating to glazing with 8000mm2 sliding vents in habitable rooms and 4000mm2 to bathrooms and WC's
 - For escape purposes - First Floor bedroom windows to have an unobstructed openable area of 0.33m² min. and at least 450mm high and 450mm wide. Bottom of openable area to be 1100mm max from FFL.
 - All glass in critical locations to be toughened glass in doors and windows adjacent to doors.
 - Toughened glass in windows with panes below 800mm above FFL.
 - PURGE VENTILATION - The clear openings of windows and doors to each habitable room should be at least 1/20 of the floor area of the room.
 - SECURITY - All Doors and Windows to be installed in accordance with PAS24:2012 or Approved Documents. Requirement Q1.
 - All habitable rooms to have min 8000mm² trickle vents
 - Open plan kitchen/diners to have min 3No. 8000mm² trickle vents

- TIMBER FLOORS
- 22mm T&G flooring grade chipboard over treated SW floor joists at 400mm max Ctrs (see floor plan for sizes and spans with strutting at 1.5m max Ctrs.
 - 100mm Glass fibre 10kg/m³ between floor joists.
 - Where joist hangers are used ensure that hangers are fitted tight to walls and are sealed evenly. Joists to be cut accurately to length and nailed to hangers, joists to be fully propped including spreader beams during construction.
 - Floor joists strapped to walls with 30x5mm galvanised M.S. anchors at 2000mm Ctrs fixed over solid noggins.
 - 12.5mm plasterboard ceiling finished with skim coat plaster.

- BEAM & BLOCK FLOORS
- 75mm reinforced screed floor finish over polythene separating layer.
 - 150 Jabilite floor insulation with 19mm up stand to edges.
 - Beam & Block floor to manufacture's details. Airbricks and Z sleeves at 1500mm Ctrs with cavity trays over.

- STEEL WORK
- All steel work and supporting pad stones to structural engineer designs.
 - Steel work supporting timber floors and trimmed openings should:
 - Allow for shrinkage of timbers.
 - 12mm min projection above steel
 - 2mm min projection below steel
 - Provide 30mins fire protection, achieved by 2 layers of plasterboard with skim coat finish to ceiling below joists.

- FOUNDATIONS
- DPC 150mm min above finished ground level with weep holes above.
 - Concrete cavity fill to 150mm below DPC level.
 - 600mm wide trench filled concrete foundations depth to suit ground conditions 1000mm min and to local authorities approval.
 - Notwithstanding the representation shown on the drawing foundations will be provided to local Authorities approval in all respects will be provided.

- DRAINAGE
- SVP fitted with accessible but enclosed Durgo Valve, or - Flashed where passing through roof and fitted with cage 1000mm above window openings.
 - 40mm plastic waste from shower, sink and wash basin fitted with deep sealed traps connected to 100mm plastic SVP.
 - All under ground drainage under parking and turning area with 150mm concrete slab over if less than 700mm cover.
 - SURFACE WATER DRAINAGE - 100mm diameter OSMA or similar underground quality plastic surface water drains from 65mm diameter RWP's with accessible shoes 100mm diameter pipe bedded and surrounded in 150mm pea shingle in straight lines between access points at 1:40 fall to soakaways of size to suit ground conditions 5m away from any building.
 - SOIL DRAINAGE - 100mm diameter OSMA or similar underground quality plastic soil drains bedded and surrounded in 150mm concrete under building concrete lintels over drains where passing through walls. Drains bedded and surrounded in 150mm pea shingle at 1:40 falls in straight lines between inspection chambers. OSMA or similar inspection chambers not exceeding 1000mm deep, bedded and surrounded in 150mm concrete. Fitted with standard duty covers and frames in footpaths and soft areas, and medium duty covers and frames in parking areas.

- ELECTRICAL
- All light switches, power sockets, TV sockets and telephone sockets fixed between 450mm and 1200mm above FFL.
 - All light fittings provided to take lamps 45 lumens per circuit watt. (Low Energy Lighting)
 - Fire Hoods to all down lighters positioned within floors
 - Mains operated smoke detector and alarm on ground and first floor in position shown to BS5446 p1
 - All electrical work required to meet the requirements of Part P (Electrical Safety) must be designed, installed, inspected and tested by a person competent to do so.
 - Prior to completion the Council should be satisfied that Part P has been complied with. This may require an appropriate BS7671 electrical installation certificate to be issued for the work by a person competent to do so.
 - PHYSICAL INFRASTRUCTURE - BT & Internet Access Point mounted on an outside wall to be connected by a through-wall duct to the Network Termination Point.
 - WHOLESTONE WATER
 - All taps supplied with wholesome water.
 - Gas fired condensing boiler with minimum SEDBUK value of 92%
 - Heating and hot water systems fitted with separate timers and thermostats.
 - Radiators fitted with thermostatic valves.
 - All pipes in unheated area and primary pipes fitted with insulation equal to the diameter of the pipe.
 - Hot water cylinder insulated with 40mm factory applied foam.
 - Hot water safety devices to be installed to prevent scalding. Requirement G3

- DESIGNERS RISK ASSESSMENT
- A Principle Designer for health and safety is required for the project.
 - The design at this stage is only completed to the planning and building regulation application stages.
 - Detailed risk assessments and method statements are required by the person or persons carrying out the final detailed works and construction.
 - All materials and workmanship is to be carried out in accordance with the most up to date British Standard codes of practice and European Standards.
 - No records are available of the existing construction and great care is required when carrying out work.
 - Services details are not provided and these require investigation prior to any commencement of work.
 - Access to site is via the existing access points.
 - There is no survey of the existing structure regarding hazardous materials.
 - Provided suitable temporary propping to the existing structure where alterations are carried out.
 - The work proposed uses traditional construction methods and materials, comply with all C.O.S.H.H. requirements.

- CAVITY WALL [0.17 U-value]
- 103mm Facing Brickwork
 - 150mm cavity fully filled with Dritherm 32
 - 100mm block inner leaf (Celcon Standard)
 - 15mm two coat plaster finish

Code 4 Lead Flashing with cavity tray

Existing Garage Roof Retained Where possible roof tile vents installed as required

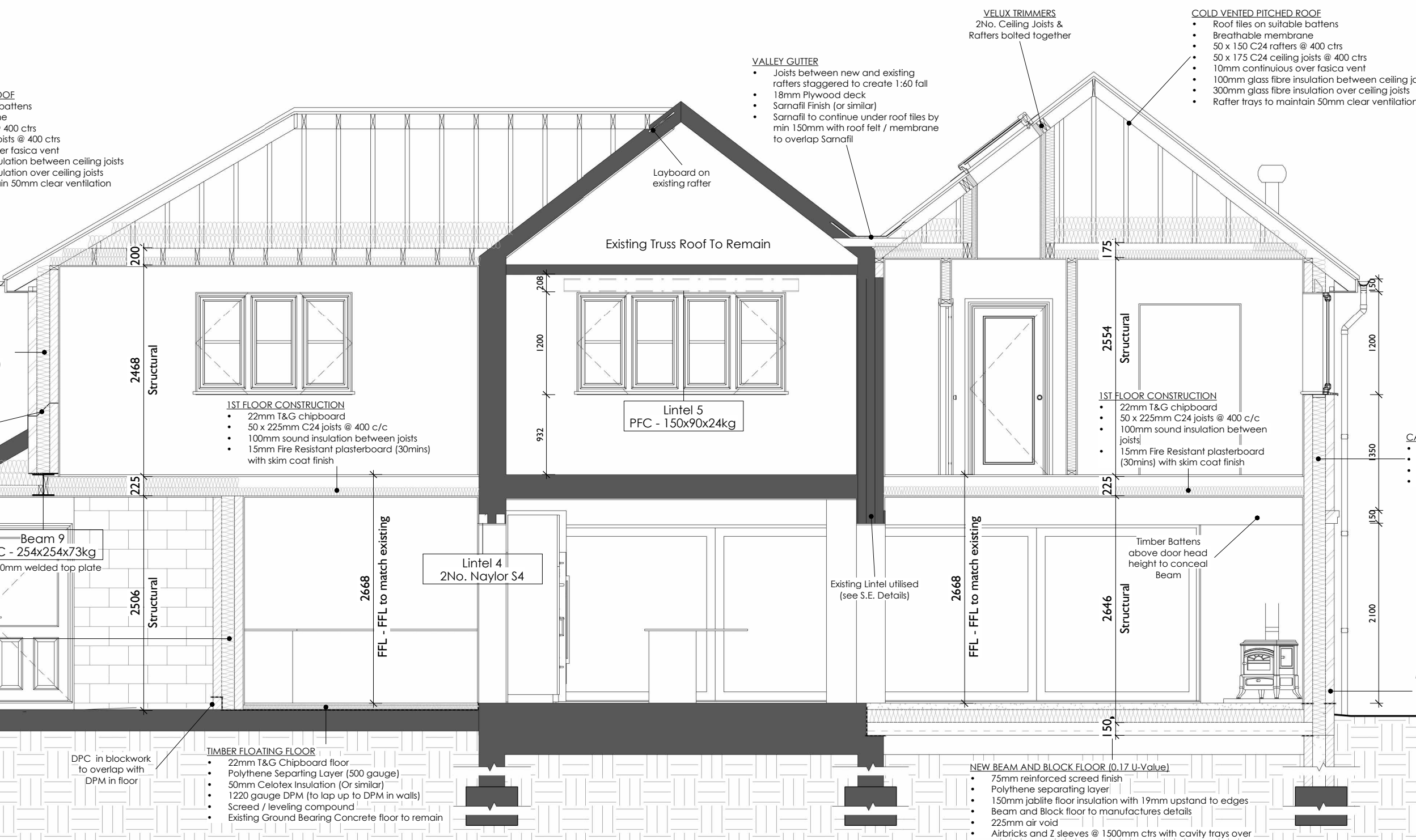
- GARAGE DIVIDING WALL
- 100mm Ultra-lightweight block wall (Plasmor Fibolite or similar)
 - 150mm cavity fully filled with Dritherm 32
 - 100mm Ultra-lightweight block wall (Plasmor Fibolite or similar)
 - 15mm two coat plaster finish

DPC in blockwork to overlap with DPM in floor

- TIMBER FLOATING FLOOR
- 22mm T&G Chipboard floor
 - Polythene Separating Layer (500 gauge)
 - 50mm Celotex insulation (Or similar)
 - 1220 gauge DPM (to lap up to DPM in walls)
 - Screed / leveling compound
 - Existing Ground Bearing Concrete floor to remain

SECTION D

1 : 50



- VALLEY GUTTER
- Joists between new and existing rafters staggered to create 1:60 fall
 - 18mm Plywood deck
 - Sarnafil Finish (or similar)
 - Sarnafil to continue under roof tiles by min 150mm with roof felt / membrane to overlap Sarnafil

VELUX TRIMMERS
2No. Ceiling Joists & Rafters bolted together

- COLD VENTED PITCHED ROOF
- Roof tiles on suitable battens
 - Breathable membrane
 - 50 x 150 C24 rafters @ 400 ctrs
 - 50 x 175 C24 ceiling joists @ 400 ctrs
 - 10mm continuous over fascia vent
 - 100mm glass fibre insulation between ceiling joists
 - 300mm glass fibre insulation over ceiling joists
 - Rafter trays to maintain 50mm clear ventilation

- 1ST FLOOR CONSTRUCTION
- 22mm T&G chipboard
 - 50 x 225mm C24 joists @ 400 c/c
 - 100mm sound insulation between joists
 - 15mm Fire Resistant plasterboard (30mins) with skim coat finish

- CAVITY WALL [0.17 U-value]
- 103mm Facing Brickwork
 - 150mm cavity fully filled with Dritherm 32
 - 100mm block inner leaf (Celcon Standard)
 - 15mm two coat plaster finish

Majority of ground levels are less than 150mm to FFL
Secondary DPC allowed for below render bell drip

- NEW BEAM AND BLOCK FLOOR [0.17 U-Value]
- 75mm reinforced screed finish
 - Polythene separating layer
 - 150mm jabilite floor insulation with 19mm upstand to edges
 - Beam and Block floor to manufacture's details
 - 225mm air void
 - Airbricks and Z sleeves @ 1500mm ctrs with cavity trays over

- COLD VENTED PITCHED ROOF
- Roof tiles on suitable battens
 - Breathable membrane
 - 50 x 150 C24 rafters @ 400 ctrs
 - 50 x 175 C24 ceiling joists @ 400 ctrs
 - 10mm continuous over fascia vent
 - 100mm glass fibre insulation between ceiling joists
 - 300mm glass fibre insulation over ceiling joists
 - Rafter trays to maintain 50mm clear ventilation

- WARM FLAT ROOF [0.15 U-value]
- Sarnafil covering
 - 150mm Kingspan Thermafoof TR27 Insulation
 - Vapour control layer
 - 18mm Ply deck
 - Furring to Rear (1:60)
 - 50 x 175mm Joists @ 400 Ctrs
 - 15mm Fire Resistant plasterboard (30mins) with skim coat finish

ROOF LANTERN TRIMMERS
3No. 50 x 175mm C24 Bolted together

Code 4 Lead Flashing with cavity tray

- 1ST FLOOR CONSTRUCTION
- 22mm T&G chipboard
 - 50 x 225mm C24 joists @ 400 c/c
 - 100mm sound insulation between joists
 - 15mm Fire Resistant plasterboard (30mins) with skim coat finish

Solid noggins bolted to web of steel beams with Simpson Strong-tie joist hangers (or similar) to support new joists

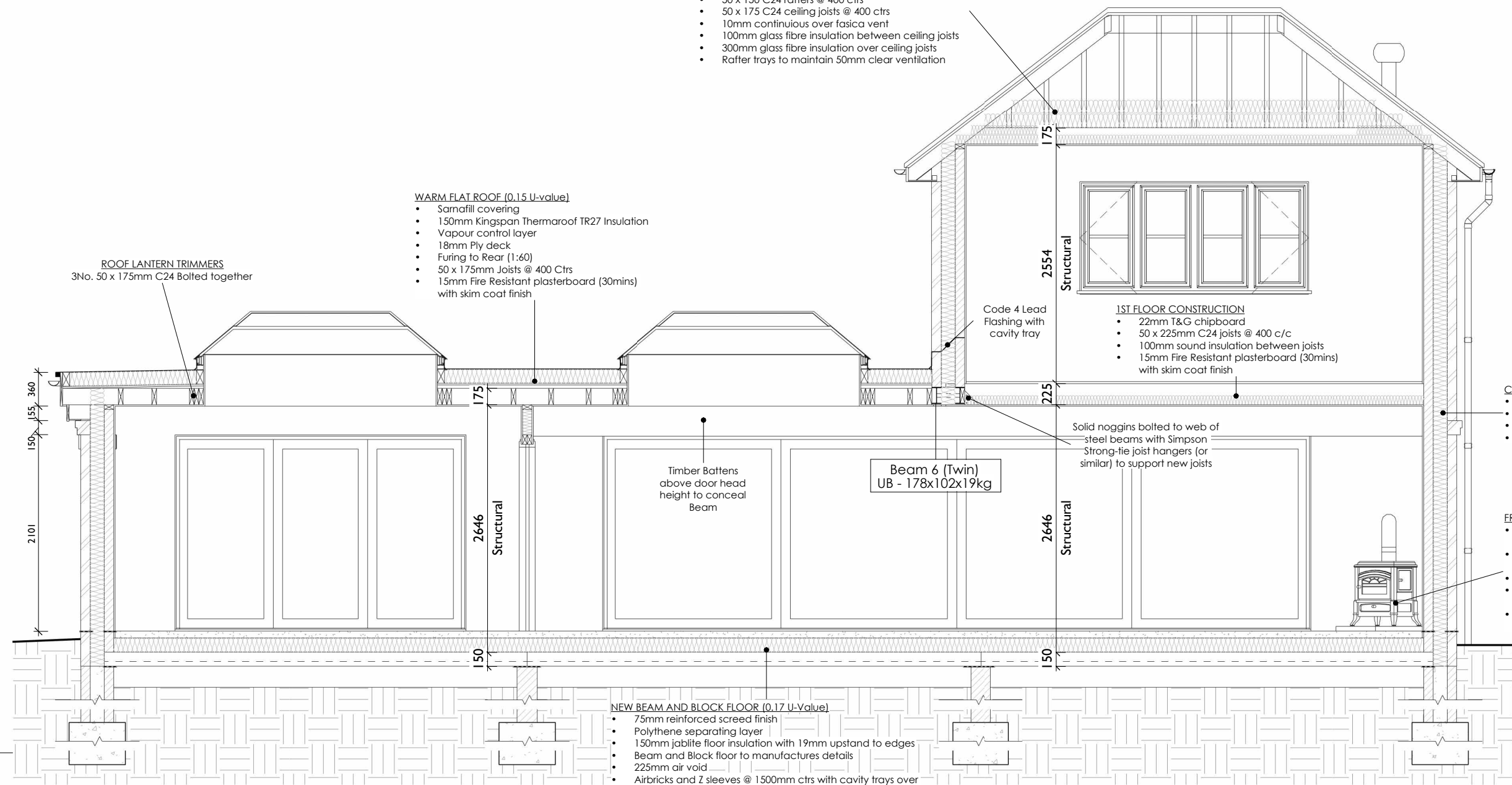
- CAVITY WALL [0.17 U-value]
- 103mm Facing Brickwork
 - 150mm cavity fully filled with Dritherm 32
 - 100mm block inner leaf (Celcon Standard)
 - 15mm two coat plaster finish

- FREE STANDING WOOD BURNER
- Non-combustible Hearth to be 12mm min above FFL and to suit manufactures requirements
 - Non-combustible surrounds to suit manufactures clearances and requirements
 - External Metal Flue to manufacture details
 - Part J Notice Plate for hearths and flues to be securely fixed in an obvious place
 - Carbon Monoxide alarm to be installed to comply with BS EN 50291-1:2018

- NEW BEAM AND BLOCK FLOOR [0.17 U-Value]
- 75mm reinforced screed finish
 - Polythene separating layer
 - 150mm jabilite floor insulation with 19mm upstand to edges
 - Beam and Block floor to manufacture's details
 - 225mm air void
 - Airbricks and Z sleeves @ 1500mm ctrs with cavity trays over

SECTION E

1 : 50



1 : 50@A2

