

IF ANY CHANGES ARE MADE AFTER PLANNING APPROVAL  
THEY MUST BE CONSULTED WITH STAAC



# STAAC

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## NOTES:

NOTE:  
THIS DRAWING IS TO BE READ IN CONJUNCTION  
WITH ALL RELEVANT ARCHITECTURAL  
DRAWINGS, CALCULATIONS, SPECIFICATIONS  
AND GENERAL INFORMATION SHEET.  
ALL FIGURED DIMENSIONS TO BE VERIFIED ON  
SITE PRIOR TO COMMENCEMENT OF WORK.  
EXISTING STRUCTURE INCLUDING FOUNDATIONS,  
BEAMS, WALLS AND LINTELS CARRYING NEW AND  
ALTERED LOADS ARE TO BE EXPOSED AND  
CHECKED FOR ADEQUACY AND REPORTED BACK  
TO ENGINEERS PRIOR TO COMMENCEMENT OF  
WORK AND AS REQUIRED BY THE BUILDING  
CONTROL OFFICER.

Please be aware that site visits will incur a £250 fee. Any alterations required will be charged as per the original fee proposal.

Rev No.	Description
0	First issue
1	REV A
2	REV B - Dimension A is 5

Client: Ruislip Manor Cottage Society

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## Drawing Setting out plan title:

Project No 23076

Date 15-07-24

Drawn by  IG

Drawing No. **SOP**

Scale 1:200@A3

# GENERAL INFORMATION SHEET

## KEY TO ABBREVIATIONS

- RWP** - RAIN WATER PIPE
- SVP** - SOIL VENTILATION PIPE
- DP** - DUCT PIPE
- FWP** - FOUL WATER PIPE
- MH** - MANHOLE
- TBR** - TO BE REMOVED
- TBC** - TO BE CHECKED ON SITE AND REPORT BACK TO ENGINEER TO VERIFY
- UNO** - UNLESS NOTED OTHERWISE
- LBW** - LOAD BEARING WALL
- EXG** - EXISTING
- FFL** - FINISH FLOOR LEVEL

## KEY TO STRUCTURAL ELEMENTS

SBXXX	- STEEL BEAMS
SCXXX	- STEEL COLUMNS
LXXX	- LINTELS
TPXXX	- TIMBER POSTS
FJXXX	- FLOOR JOISTS
FTXXX	- FLOOR TRIMMERS
FRJXXX	- FLAT ROOF JOISTS
FRTXXX	- FLAT ROOF TRIMMERS
RJXXX	- RAFTERS
RTXXX	- RAFTER TRIMMERS
TLXXX	- TIMBER LINTELS
TBXXX	- TIMBER BEAMS
BATXXX	- TIMBER PLATES

## REFERENCES

	SPREADER
	STRUCTURAL NOTES
	REMOVING / RELOCATING / NOTES
	REFER TO SPECIFICATIONS
	DETAILS REFER TO SPECIFICATIONS
	DETAILS REFER TO STRUCTURAL DETAILS

## STRUCTURAL NOTES

- BAT - WHERE JOISTS/RAFTERS ARE SUPPORTED OFF EXISTING WALLS PROVIDE 47mm WIDTH C24 TIMBER PLATE FIXED TO WALL USING M12 CHEMICAL ANCHOR BOLTS @ 400mm c/c WITH TIMBER SUPPORTED ON GALV MS JOISTS HANGERS WELL SPIKED TO PLATE, PLATE DEPTH TO MATCH SUPPORTED RAFTER/JOIST
- UNLESS NOTED OTHERWISE ALL TIMBER JOISTS TO TIMBER JOISTS / TIMBER BEAMS / STEEL BEAMS WITH BLOCKING TO BE SUPPORTED BY ADEQUATE JOIST HANGERS SIMPSON STRONG TIE OR SIMILAR
- ALL TIMBERS DOUBLED UP TO BE BOLTED TOGETHER USING M12 BOLTS @400 c/c + SQ WASHERS STAGGERED, minimum 50mm EDGE DISTANCE
- ALL STEELS DOUBLED UP TO BE BOLTED TOGETHER USING M12 BOLTS + 15mm TUBE SPACERS @ 0.6m CTRS
- PADSTONES TO BE PRECAST CONCRETE SUPREME CONCRETE OR SIMILAR,  $f_{ck} >= 40 \text{ MPa}$
- STEEL BEAM END BEARING 100mm UNO, LINTELS END BEARING ACCORDING TO MANUFACTURER DETAILS
- LINTEL ON EXISTING WALLS 'TBC' AFTER EXPOSING WALL
- SEE CALCULATION REPORT FOR STRUCTURAL CONNECTIONS
- STRUCTURAL STEELS TO BE S275 GRADE UNO
- FOR WELDED TOP AND BOTTOM PLATES REFER TO SK01, DETAILS 9, 10 AND 11
- WHERE STUD WALLS ARE BEING BUILT ON EXG JOISTS IT IS REQUIRED TO DOUBLE UP THE JOIST OR TO ADD NOGGINS TO BRIDGE TWO EXG JOISTS OR TO ADD NOGGINGS BELOW STUD WALL WHERE STUD WALL RUNS PERPENDICULAR TO THE EXG JOISTS. NOGGINS TO BE AT LEAST DOUBLED UP 50MM WIDE C24 TIMBERS SAME DEPTH AS EXG JOISTS AND TO BE WELL FIXED TO EXG JOISTS. IN ANY CASE THIS IS 'TBC'
- STEEL POSTS IN TRADITIONAL MASONRY STRUCTURE TO BE TIED TO MASONRY WITH RESIN ANCHORS OR WALL TIES 'TBC'
- STEEL BEAMS SITTING ON MASONRY PIERS TO BE CENTERED ON THE PIER AND TO HAVE END BEARING ACROSS ENTIRE PIER LENGTH UNO
- CONCRETE MIX TO COMPLY TO BS-8500 AND BS EN 206-1:
- REPORT BACK IF CONCRETE IN CONTACT WITH SULPHATE, GROUNDWATER, ACIDS, CHLORIDES AND OTHER CHEMICALS OR IF BURIED IN ANY KIND OF ADVERSE SOIL CONDITIONS AND NOT SPECIFIED BELOW
- TRENCH FILL FOUNDATIONS TO BE GRADE ST2, CONSISTENCE CLASS S4
- PLAIN GROUND FLOOR SLAB TO BE GRADE ST2, CONSISTENCE CLASS S2
- EXTERNAL PATHS AND DRIVEWAYS TO BE GRADE ST5 OR PAV1, CONSISTENCE CLASS S2
- REINFORCED CONCRETE WITH 35MM CONCRETE COVER XC1 AND XC2 EXPOSURE TO BE RC25/30, CONSISTENCE CLASS S2
- REINFORCED CONCRETE WITH 35MM CONCRETE COVER XC3, XC4 AND XF1 EXPOSURE TO BE RC32/40, CONSISTENCE CLASS S2
- REINFORCED CONCRETE WITH 40MM CONCRETE COVER XC1 TO XC4 AND XF1 EXPOSURE TO BE RC28/35, CONSISTENCE CLASS S2

## GENERAL NOTES

FOR CONSTRUCTION METHOD REFER TO POROTHERM BEST PRACTICE GUIDE

REFER TO LABC CONSTRUCTION DETAILS/POROTHERM ROBUST DETAILS IF DETAIL NOT SHOWN ON THE DRAWINGS OR SPECIFICATIONS

BUILDING CONTROL APPLICATION IS THE RESPONSIBILITY OF EITHER THE BUILDER OR CLIENT. AWAITS FULL APPROVAL ON DRAWINGS /CALCULATIONS BEFORE ORDERING MATERIALS / COMMENCING WORK

ALL MATERIALS TO MATCH EXISTING WHERE POSSIBLE

EXISTING MANHOLES AND DRAINS TO BE INVESTIGATED AND REPORT BACK TO ENGINEER PRIOR TO COMMENCEMENT OF WORKS

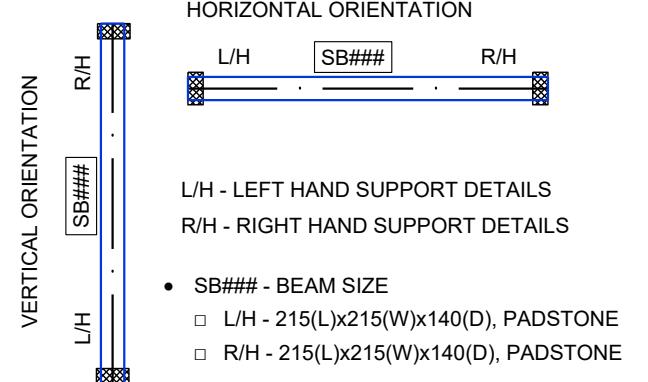
STRUCTURAL NOTES TO BE CONFIRMED PRIOR TO COMMENCEMENT WORK

TBC - TO BE CHECKED ON SITE AND REPORT BACK TO ENGINEER TO VERIFY

## KEY TO SYMBOLS:

	DENOTES BLOCK / BLOCK
	CAVITY WALL
	DENOTES TIMBER STUD WALLS
	WALL ON FLOOR
	BELOW/ABOVE
	WALLS TBR UNO
	TIMBER JOISTS
	MULTIPLE TIMBERS/FLITCH BEAM
	LINTELS
	PROPOSED GUTTER
	STEEL BEAMS

## BEAM SUPPORT DETAILS



1:50 SCALE in METRES



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Rev No.	Description
0	First issue
1	REV A
2	REV B - Dimensions, Air Bricks

Client: Ruislip Manor Cottage Society

Address: Green Walk Garages Ruislip HA4 8HJ

Project: New build

Drawing title: General information sheet

Project No	23076
Date	15-07-24
Drawn by	JG
Drawing No	BR00
Scale 1:50@A3	



KEY TO SYMBOLS:

- ██████████ DENOTES BLOCK / BLOCK
- ██████████ CAVITY WALL
- ██████████ DENOTES 100MM BLOCK WALL
- ██████████ DENOTES TIMBER STUD WALLS
- WALL ON FLOOR
- WALL BELOW/ABOVE
- TIMBER JOISTS
- ██████████ MULTIPLE TIMBERS/FLITCH BEAMS
- ██████████ LINTELS
- NEW CONCRETE

**STRUCTURAL TIMBERS** - (NOTE: THE LABELS ARE DEFINING THE LEFT HAND SIDE OF THE HOUSE ON PLANS. RIGHT HAND SIDE IS MIRRORED)

- FJ101 - 225x47 @400 C24
- FT101 - 225x47 C24 BOLTED + 10x225 FLITCH PLATE (SEE CALCS FOR BOLTING DETAILS)
- FT102 - 225x47 C24 BOLTED + 16x225 FLITCH PLATE (SEE CALCS FOR BOLTING DETAILS)
  - L/H - 100(L)x440x330(D), PADSTONE
  - R/H - 100(L)x215x140(D), PADSTONE
- FT103 - 225x47 C24 BOLTED
- FT104 - 225x47 C24 BOLTED
- FT105 - 225x47 C24 BOLTED
- TP101 - 100x100 C24 POST
- TP102 - 150x150 C24 POST (DETAIL 32/33)
- TP103 - 100x100 C24 POST ON 215(W)x100(L)x140(D), PADSTONE

**STRUCTURAL TIMBERS** - (NOTE: THE LABELS ARE DEFINING THE LEFT HAND SIDE OF THE HOUSE ON PLANS. RIGHT HAND SIDE IS MIRRORED)

- RJ201 - 170x47 @400 C24
- VR201 - 3/225x47 C24 BOLTED
- RB201 - 2/250x47 C24 BOLTED
  - LH - FIX TO TP201 (SIMPSON POST CAP CONNECTOR)
  - R/H - FIX TO TP201 (SIMPSON POST CAP CONNECTOR)
- RB202 - 2/250x47 C24 BOLTED + 10x225 FLITCH PLATE (SEE CALCS FOR BOLTING DETAILS)
  - L/H - 100(L)x215x140(D), PADSTONE
  - R/H - 100(L)x215x140(D), PADSTONE
- RB203 - 2/250x47 C24 BOLTED + 16x225 FLITCH PLATE (SEE CALCS FOR BOLTING DETAILS)
  - L/H - FIX TO TP102 (SEE DETAIL 32)
  - R/H - 100(L)x215x140(D), PADSTONE
- RB204 - 2/200x47 C24 BOLTED + 10x200 FLITCH PLATE (SEE CALCS FOR BOLTING DETAILS)
  - L/H - FIX TO RB203 (SAE600/96/2 HEAVY DUTY HANGER)
  - R/H - FIX TO TP201 (SIMPSON POST CAP CONNECTOR)
- RT201 - 3/170x47 C24 BOLTED
- RT202 - 2/200x47 C24 BOLTED
- RT203 - 2/200x47 C24 BOLTED
- RT204 - 4/170x47 C24 BOLTED
- RT205 - 2/170x47 C24 BOLTED (FALSE CHIMNEY SUPPORT)
- CJ201 - 150x47 @400 C24
- CT201 - 2/200x47 C24 BOLTED + 10x200 FLITCH PLATE (SEE CALCS FOR BOLTING DETAILS)
- CT202 - 2/150x47 C24 BOLTED
- TP201 - 100x100 C24 POST
- TP102 - 150x150 C24 POST

**LINTELS**

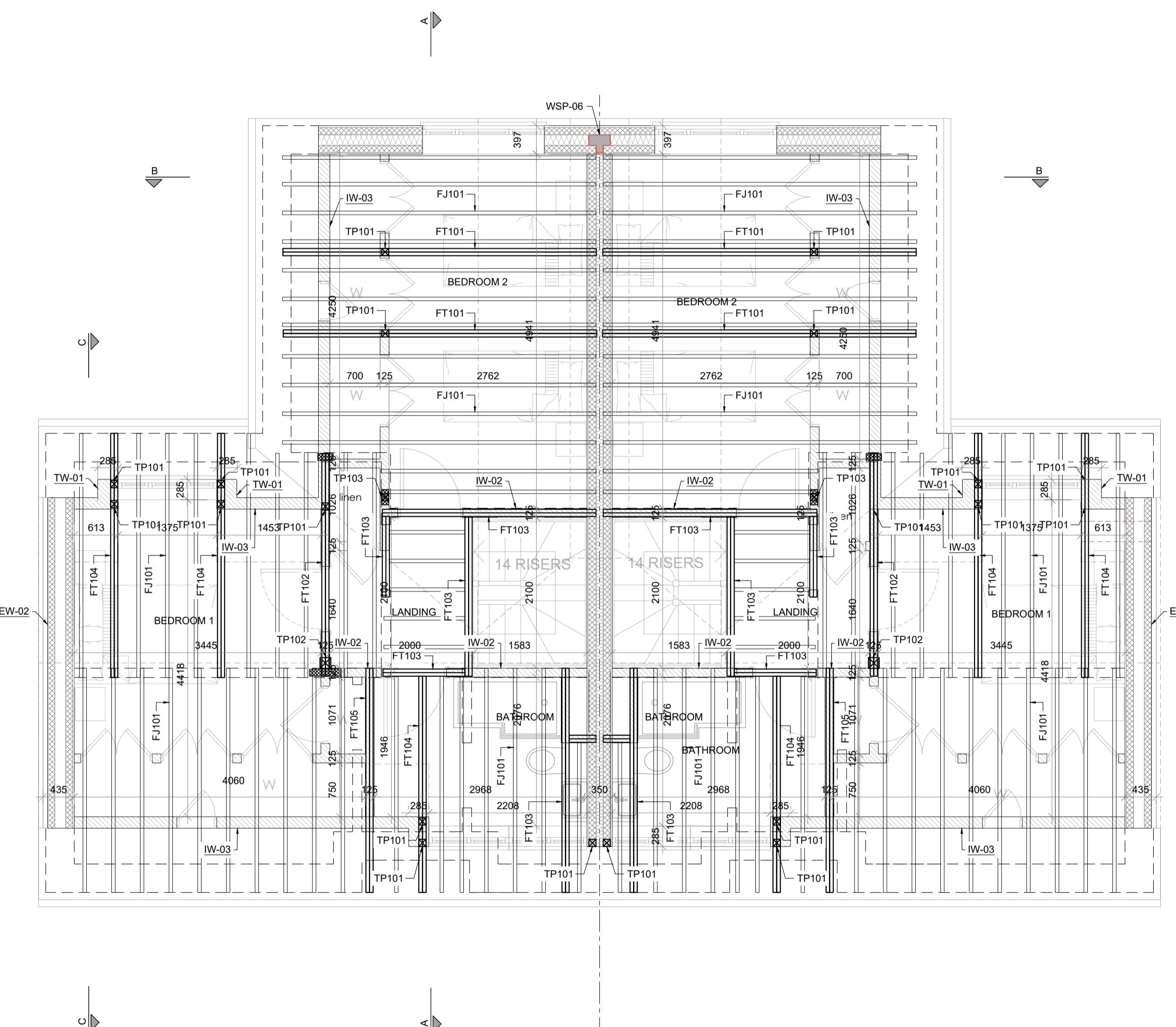
- L201 - CATNIC CG150/100

GENERAL NOTES

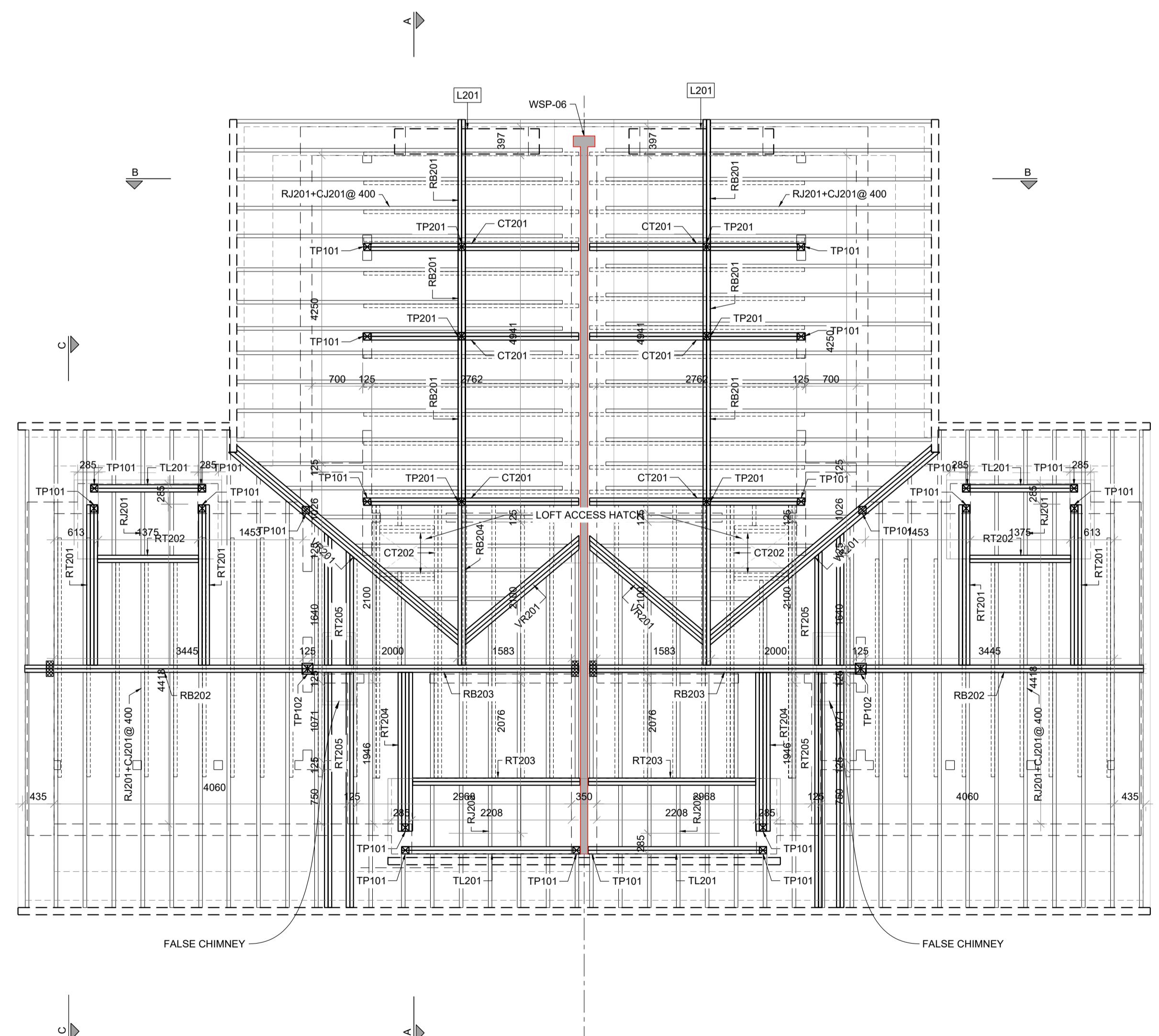
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FIRST FLOOR PLAN SHOWING STRUCTURE AT FLOOR LEVEL



ROOF PLAN

**STAAC**

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Rev No.	Description
0	First issue
1	REV A
2	REV B - Dimensions, Air Bricks

Client: Ruislip Manor Cottage Society

Address: Green Walk Garages Ruislip HA4 8HJ

Project: New build

Drawing Floor plans  
title:

Project No 23076

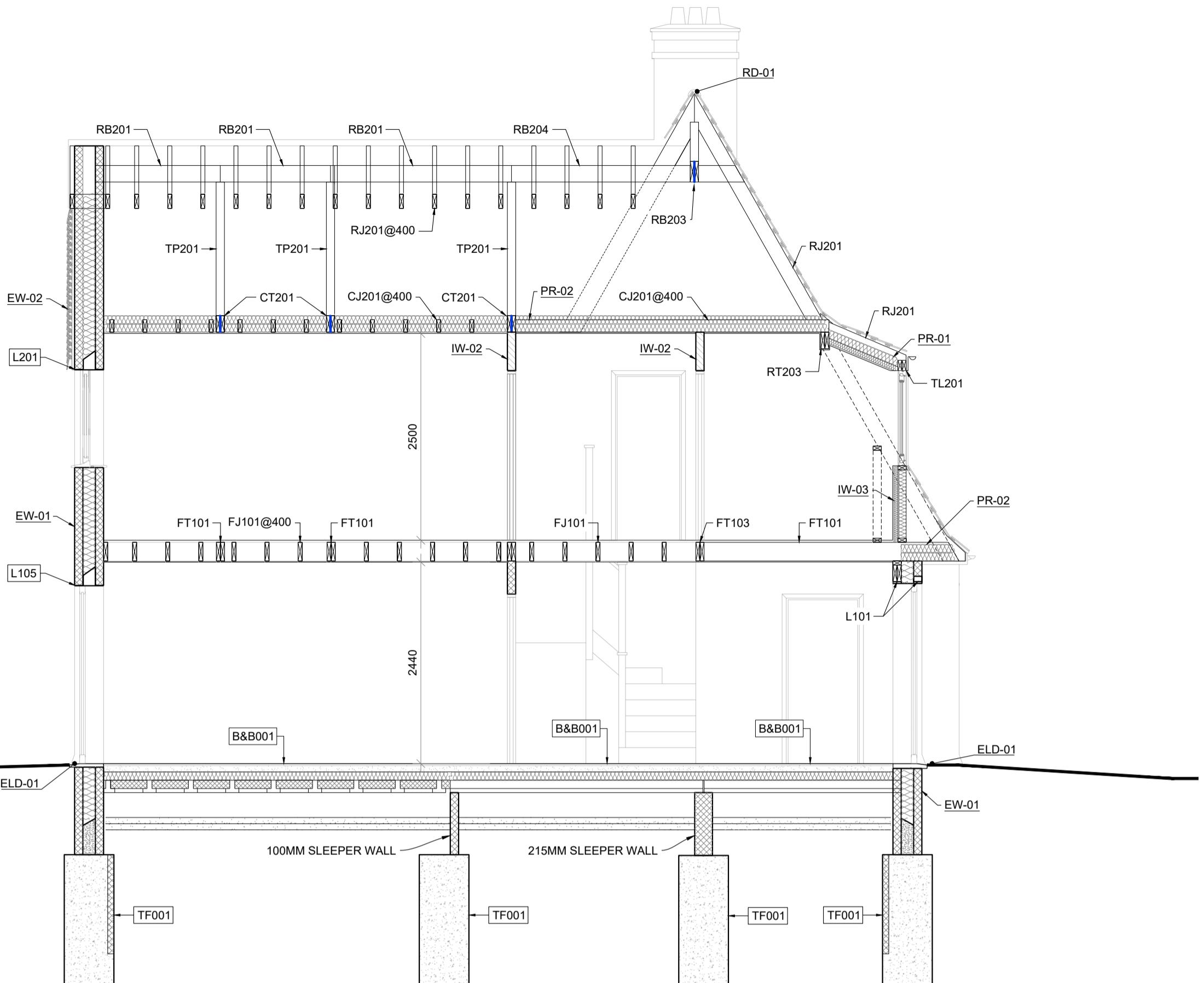
Date 15-07-24

Drawn by JG

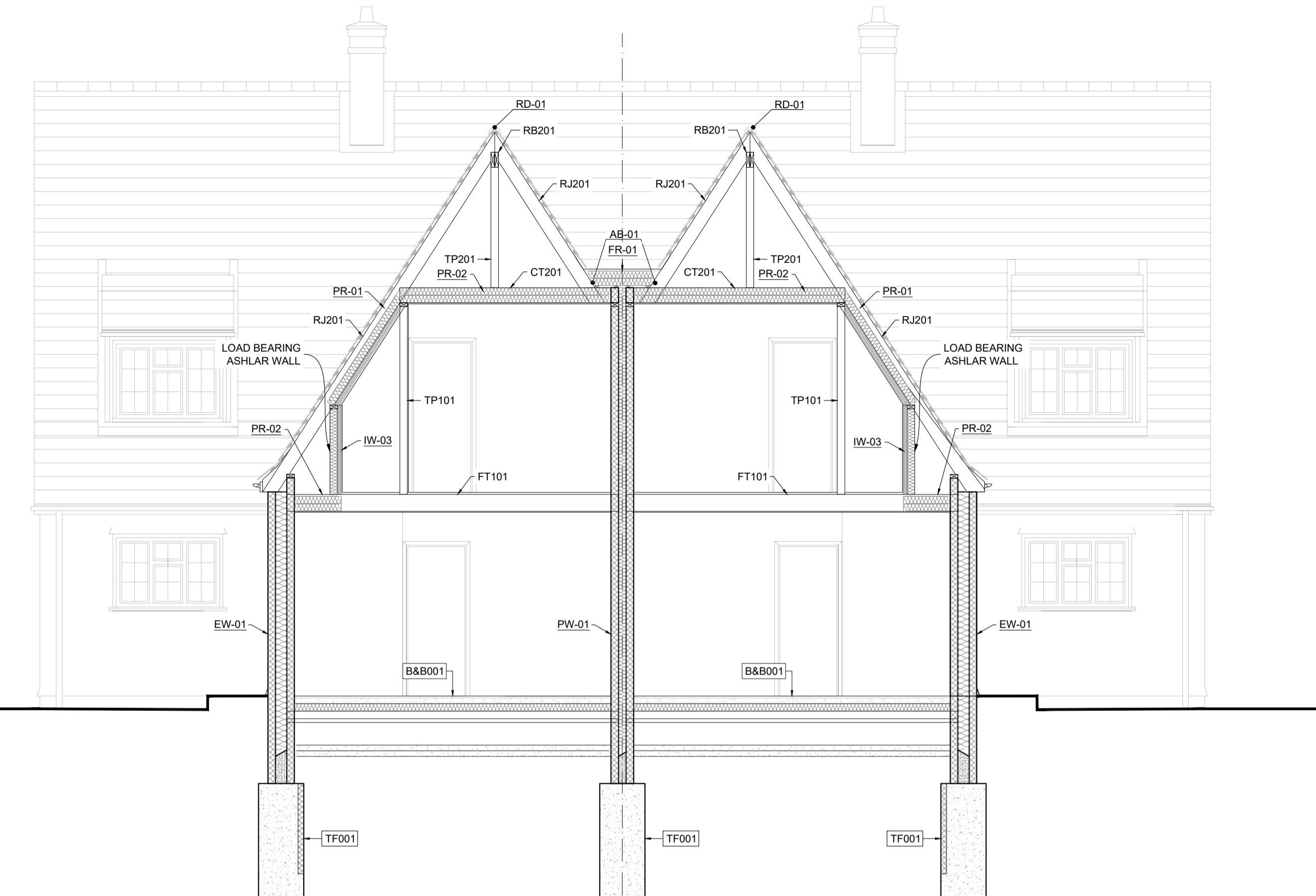
Drawing No BR02

Scale 1:50@A1 / 1:100@A3

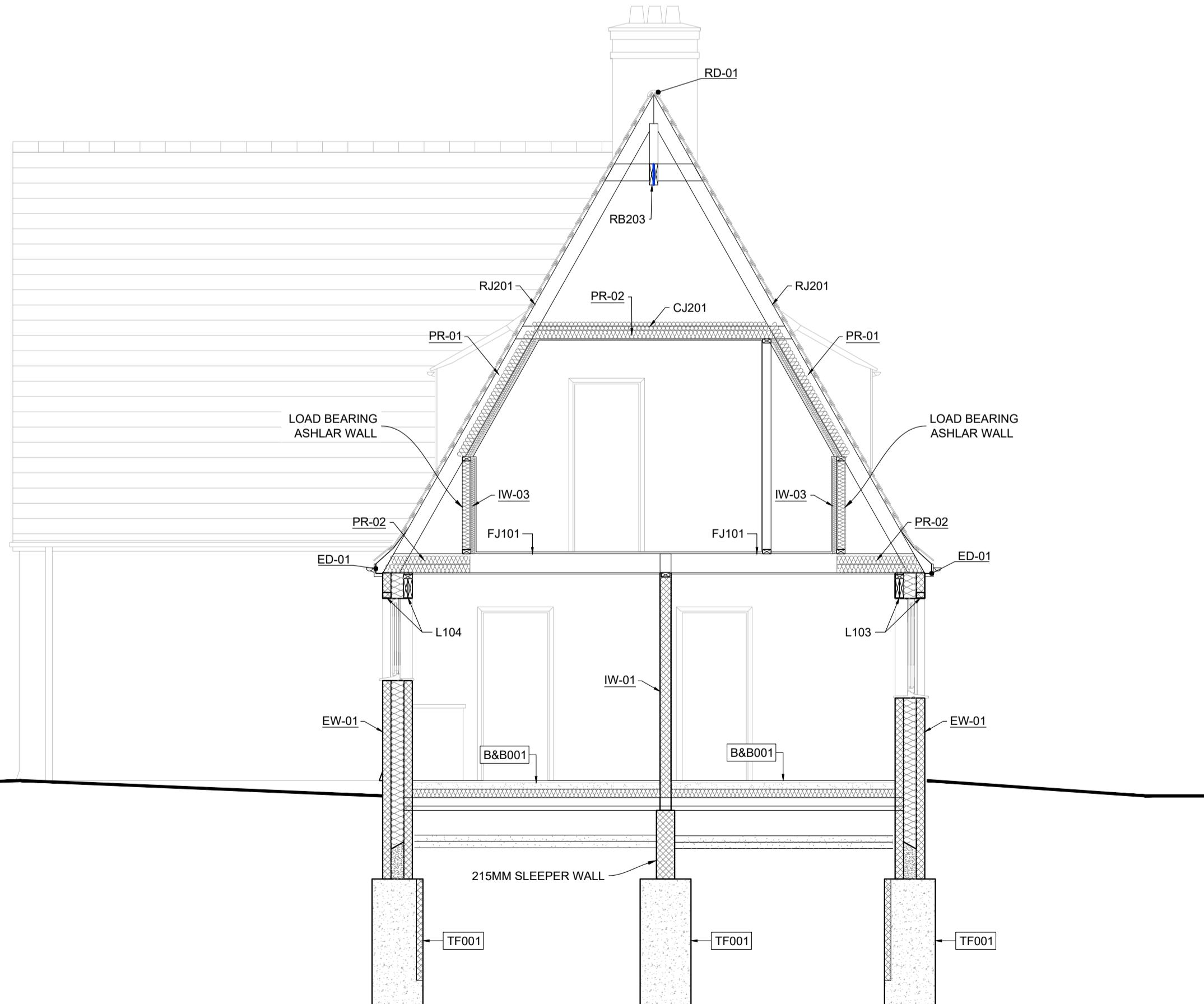
## KEY TO SYMBOLS:



SECTION A-A



SECTION B-B



SECTION C-C

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1	REV A
2	REV B - Dimensions, Air Bricks

Client: Ruislip Manor Cottage Society

Address: Green Walk Garages Ruislip HA4  
8HJ

Project: New build

Drawing Sections  
title:

Project No 23076

Date 15-07-24

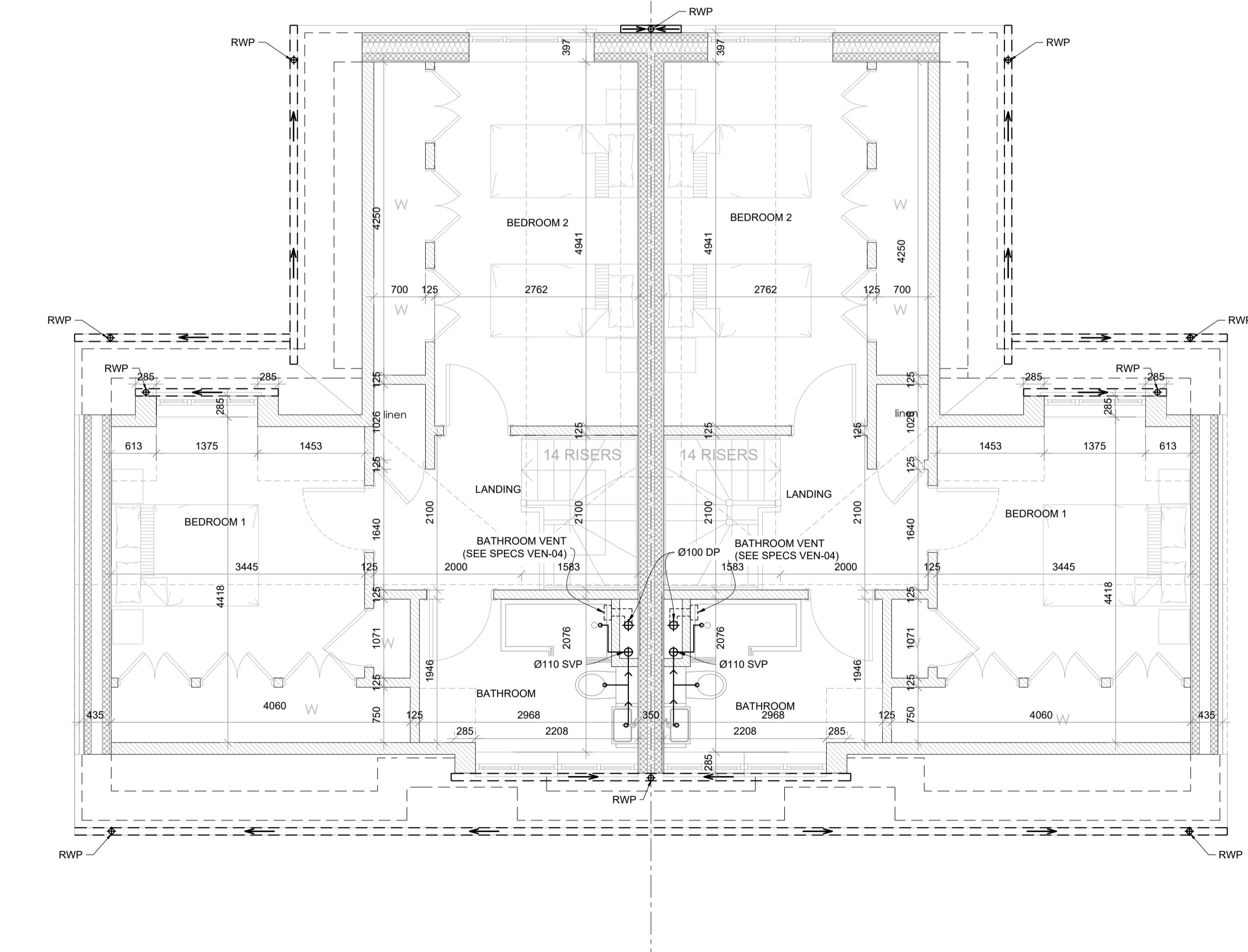
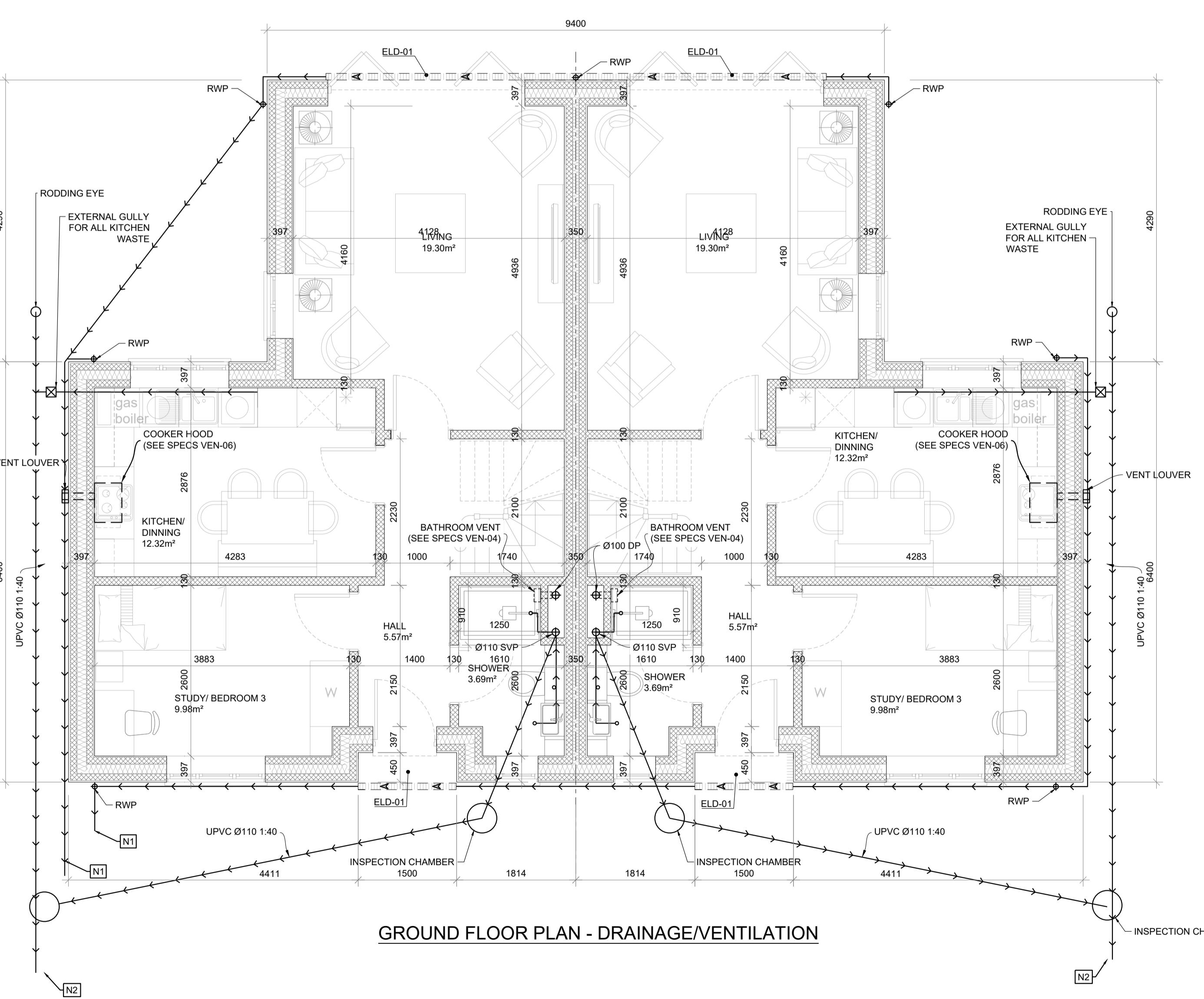
Drawn by JG

Drawing No BR03

Scale 1:50@A1 / 1:100@A3

**NOTES**

- N1 - 110MM PIPE TO SOAKAWAY OR EXISTING SURFACE WATER DRAINAGE.
- N2 - CONNECT TO EXG SEWER, TBC ON SITE



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0 First issue  
1 REV A  
2 REV B - Dimensions, Air Bricks

**Client:** Ruislip Manor Cottage Society

**Address:** Green Walk Garages Ruislip HA4 8HJ

**Project:** New build

**Drawing:** Floor plans -  
**title:** Drainage/Ventilation

**Project No** 23076

**Date** 15-07-24

**Drawn by** JG

**Drawing No** BR04

**Scale** 1:50@A1 / 1:100@A3

## ELECTRICAL LEGEND:

gd	AUTOMATED GARAGE DOOR CONTROLS
uf	UNDERFLOOR HEATING CONTROLS
2	DOUBLE SOCKET
2	TV
2	2AMP SOCKET FOR LAMPS
2	HIGH LEVEL SOCKET
2	LOW LEVEL SOCKET
bt	TELEPHONE POINT
sp	SHOWER SOCKET
wm	WASHING MACHINE FUSE SPUR
dw	DISHWASHER FUSE SPUR
dr	TUMBLE DRYER FUSE SPUR
ov	OVEN FUSE SPUR
so	STEAM OVER/PLATE WARMER SPUR
pw	PLATE WARMER
fr	FRIDGE FUSE SPUR
fz	FREEZER FUSE SPUR
tr	TOWEL RAIL FUSE SPUR
ht	BOILING WATER TAP SPUR
rad	ELECTRIC RADIATOR FUSE SPUR
ex	EXTRACTOR FUSE SPUR
al	ALARM FUSE SPUR
ih	IMMERSION HEATER SPUR
gb	GAS BOILER SPUR

NOTES:  

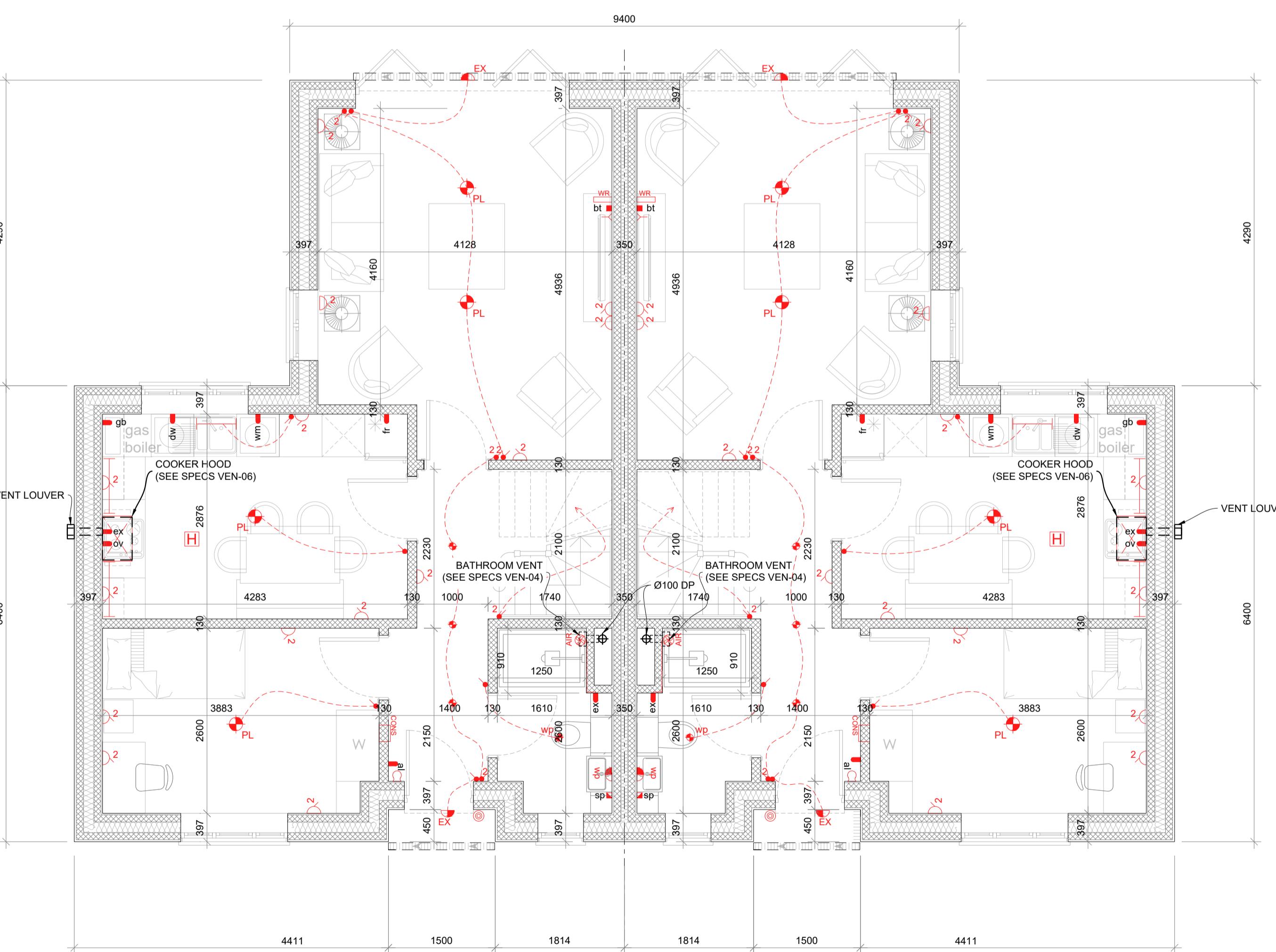
- All Works to be carried out with a Part P Competent person
- Diagram is schematic and must be read in conjunction with all other relevant construction drawings
- Plates to be stainless steel with white plastic within Kitchen only. White plastic elsewhere.
- Lighting and Electrics as existing other than that shown.
- Standard socket heights in accordance with the building regulations. Exact positions to be confirmed on site with electrician

## LIGHTING LEGEND:

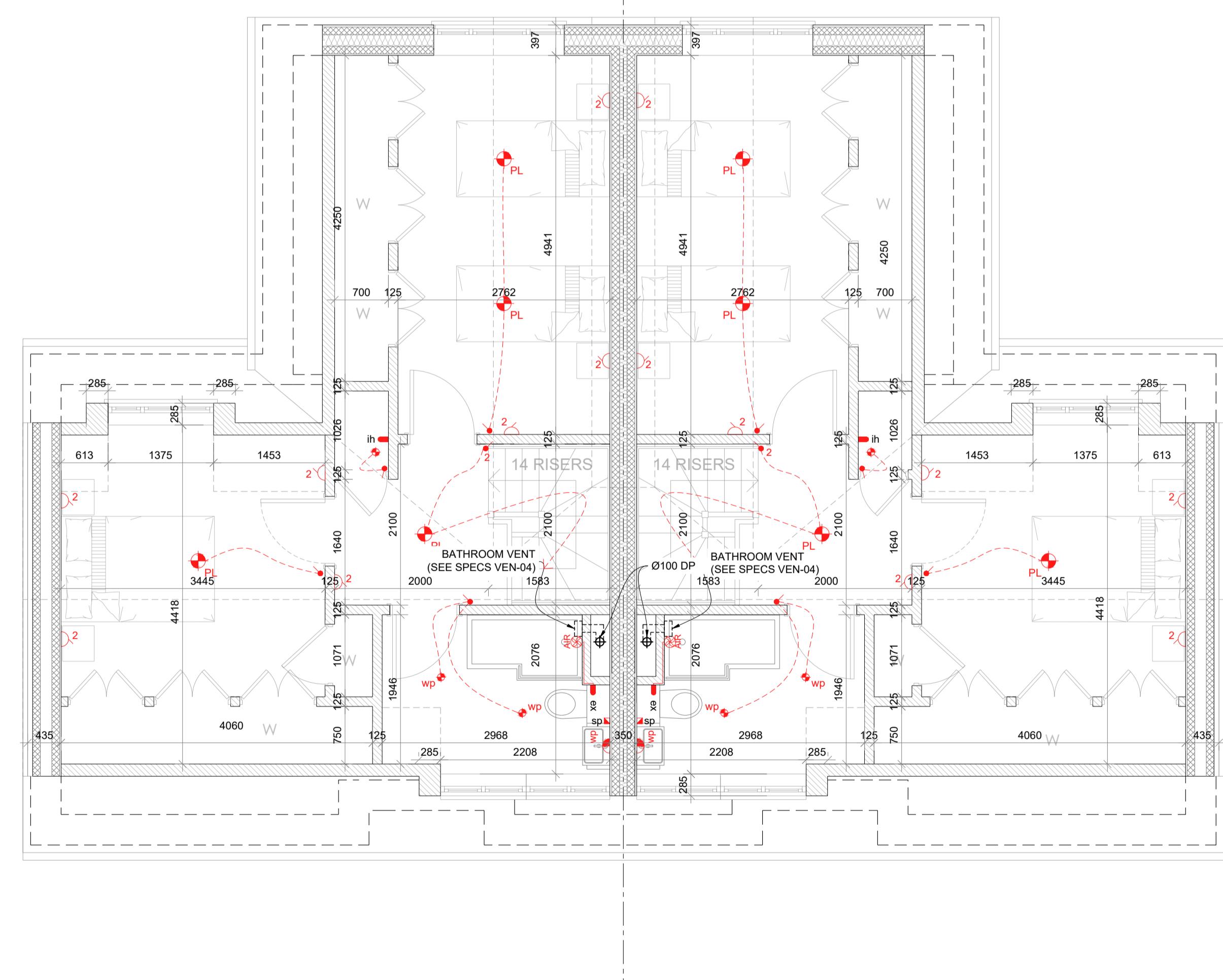
2	LOW VOLTAGE DOWNLIGHTER
wp	DOWN LIGHTER TO WET AREA IP RATED
2	DIRECTIONAL DOWNLIGHT
2	DIRECTIONAL SPOTLIGHT
PL	PENDANT LIGHT
2	LAMP
2	EXTRACTOR FAN (SEE NOTE)
2	WALL LIGHT
2	LED STRIP LIGHT (WARM WHITE)
wp	WALL LIGHT TO WET AREA IP RATED
2	DIRECTIONAL WALL LIGHT
2	WALL LIGHT TO EXTERNAL AREAS
2	EXTERNAL DIRECTIONAL WALL LIGHT
2	PIR (SEE ADDITIONAL NOTE BELOW)
2	TREAD LIGHT
2	HIGH LEVEL WALL LIGHT FOR BUNK BED
2	LOW LEVEL WALL LIGHT FOR DESK UNDER BUNK BED
2	FLUORESCENT TUBE LIGHT
2	UNDER CUPBOARD HALOGEN LIGHT
2	LIGHTSWITCH
2	2 WAY LIGHTSWITCH
2	LIGHT SWITCH WITH DIMMER
2	DOOR CATCH SWITCH
2	PULL CHORD SWITCH
2	2 AMP SOCKET FOR LAMPS

NOTES:  

- Lighting and Electrics as existing other than that shown - subject to conditions on site
- All Works to be carried out with a Part P Competent person
- Drawing is schematic and must be read in conjunction with all other relevant construction drawings
- Light switches and plates to have no visual impact.
- Plates to be stainless steel with white plastic within Kitchen only. White plastic elsewhere.
- Down lights all to be low voltage fittings
- All lighting to be IP rated
- P.I.R. sensors to external lights to be mains circuit operated with on/off and active controls
- Extracts in bathrooms @ 15 l/s with 15 min over-run



GROUND FLOOR PLAN - ELECTRICAL AND LIGHTING



FIRST FLOOR PLAN - ELECTRICAL AND LIGHTING

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0	First issue
1	REV A
2	REV B - Dimensions, Air Bricks

Client: Ruislip Manor Cottage Society

Address: Green Walk Garages Ruislip HA4 8HJ

Project: New build

Drawing: Floor plans - electrical and lighting

Project No: 23076

Date: 15-07-24

Drawn by: JG

Drawing No: BR05

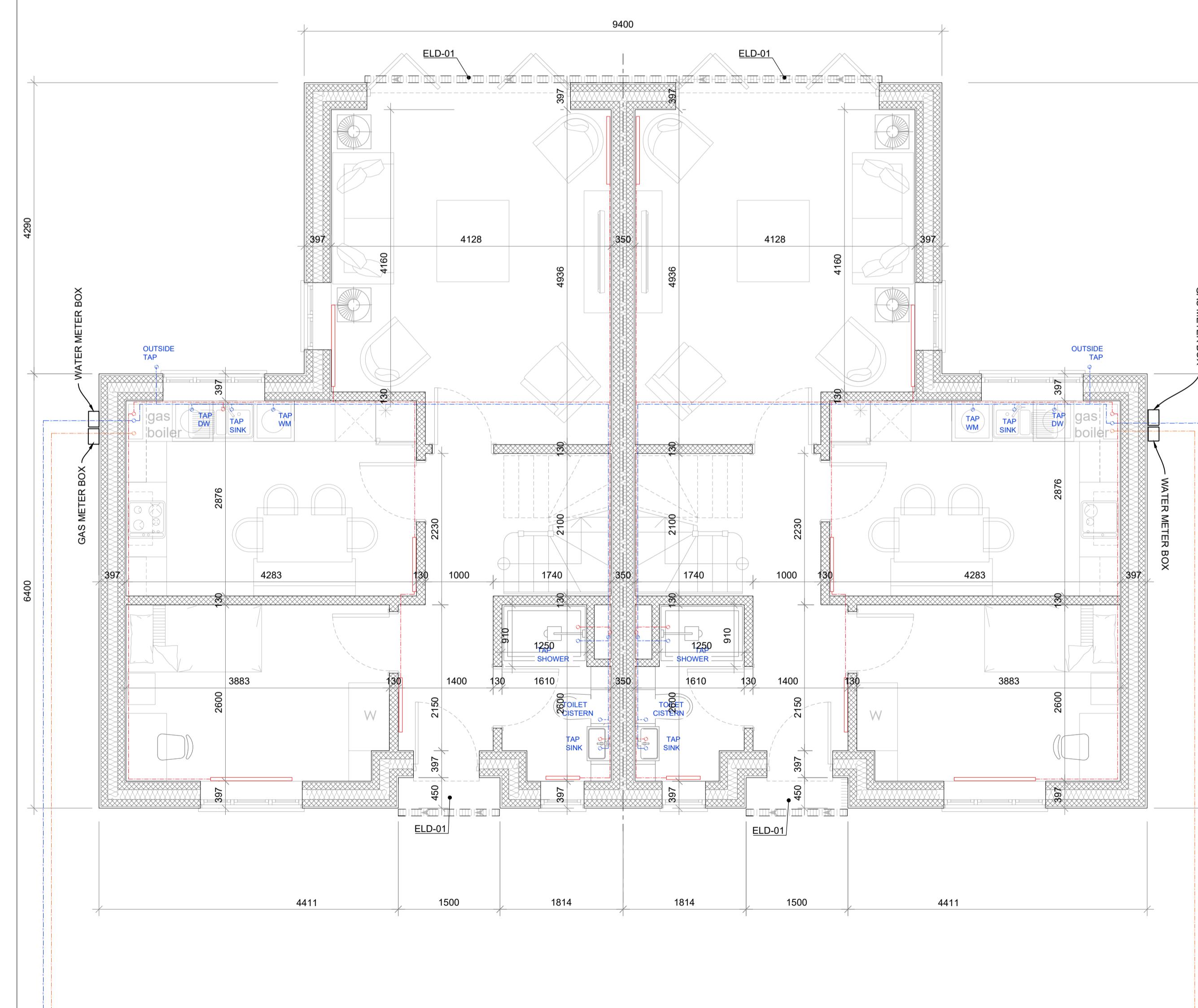
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## **WATER & GAS SUPPLY LEGEND:**

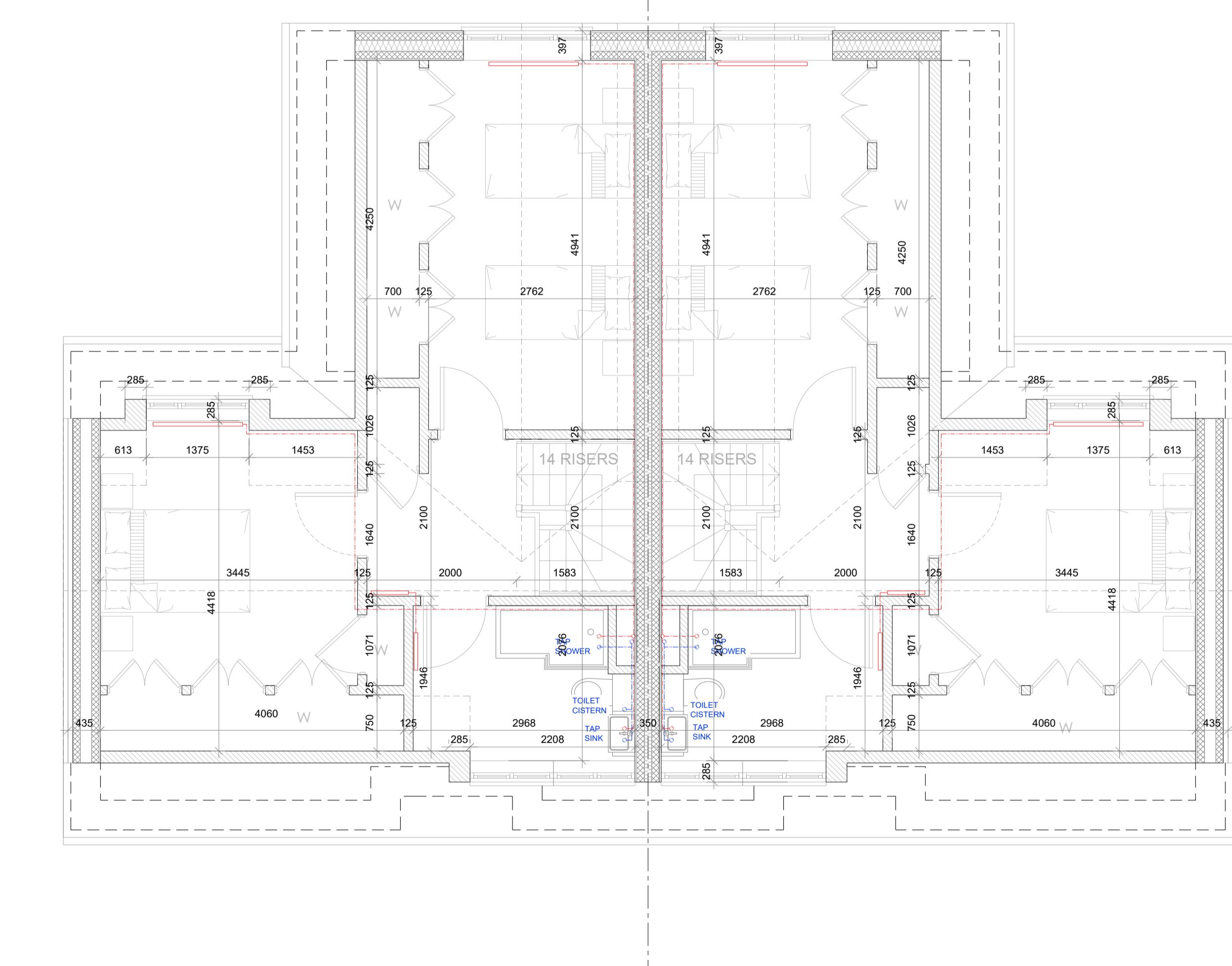
— HW — HW — HOT WATER

— CW — CW —

— GAS — GAS — GAS



## GROUND FLOOR PLAN - WATER AND GAS SUPPLY



## FIRST FLOOR PLAN - WATER AND GAS SUPPLY

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Rev No.	Description
0	First issue

2 REV B - Dimensions, Air Bricks

Project: New build

Drawing title: Floor plans - water and gas supply

Project No 23076

Date	15-07-24
Drawn by	IC

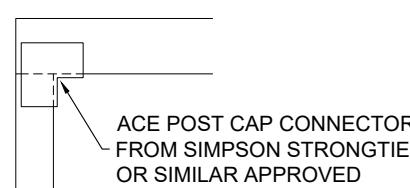
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Drawing No BR06

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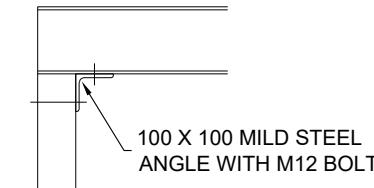
# TYPICAL DETAILS SHEET (where applicable)

THESE GENERIC DETAILS ARE FOR ON SITE GUIDANCE ONLY - EXACT SETTINGS OUT IS TO BE DETERMINED ON SITE TO THE SATISFACTION OF THE ARCHITECT / CLIENT - REPORT TO ENGINEER FOR ANY SITE SPECIFICS DETAILS NOT COVERED

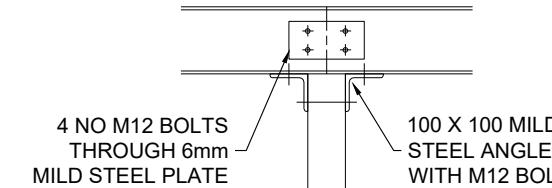
POSTS ADJACENT  
MASONRY ARE TO BE  
CONNECTED AS THE  
GENERAL NOTES



DETAIL 1

TIMBER BEAM TO  
TIMBER POST

DETAIL 2

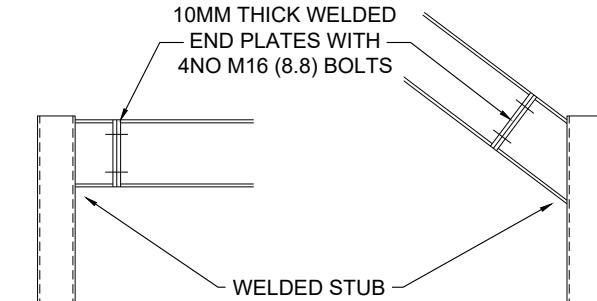
STEEL BEAM TO  
TIMBER POST

DETAIL 3

2No STEEL BEAMS TO  
TIMBER POST

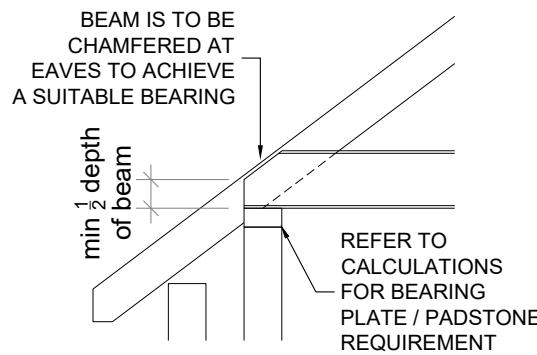
DETAIL 4

STEEL BEAM TO STEEL POST



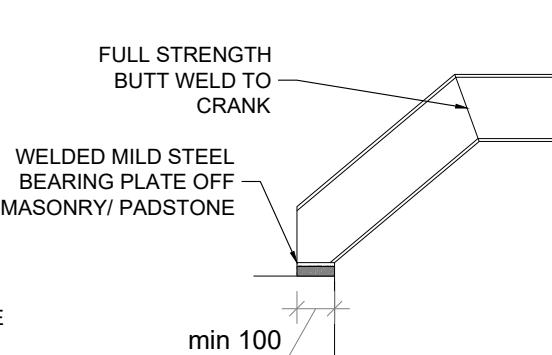
DETAIL 5

STEEL BEAM TO STEEL POST



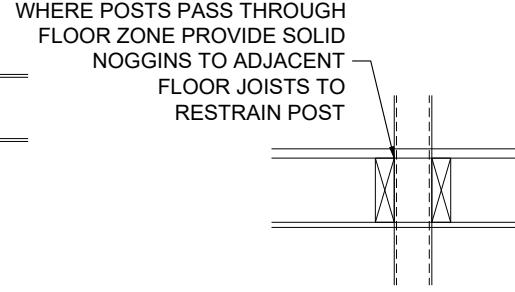
DETAIL 6

STEEL BEAM - EAVES BEARING

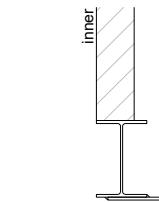


DETAIL 7

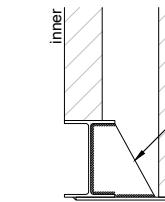
CRANKED BEAM DETAIL



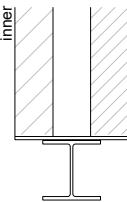
DETAIL 8

POST RESTRAINT THROUGH  
FLOOR ZONE

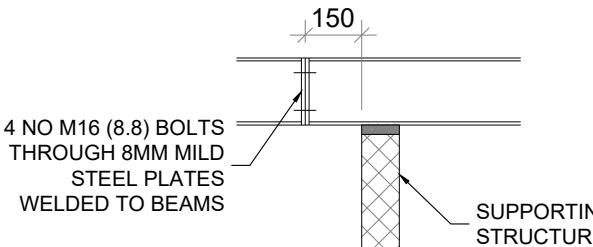
DETAIL 9

OUTER LEAF SUPPORT  
WALL WIDTH < 300mm

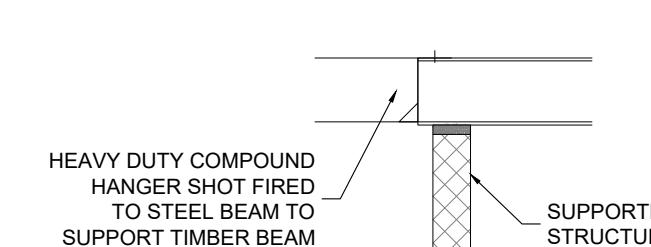
DETAIL 10

OUTER LEAF SUPPORT  
300 < WALL WIDTH < 350MM

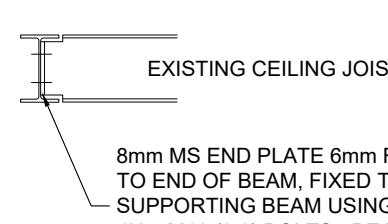
DETAIL 11

WIDE WALL INTERNAL OR  
EXTERNAL CLAD / RENDERED

DETAIL 12

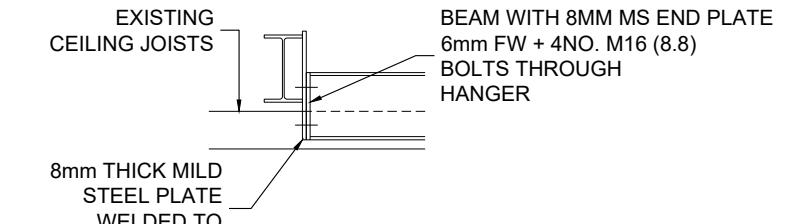
2No STEEL BEAMS - JOINT  
BEARING

DETAIL 13

2No STEEL BEAMS - JOINT  
BEARING

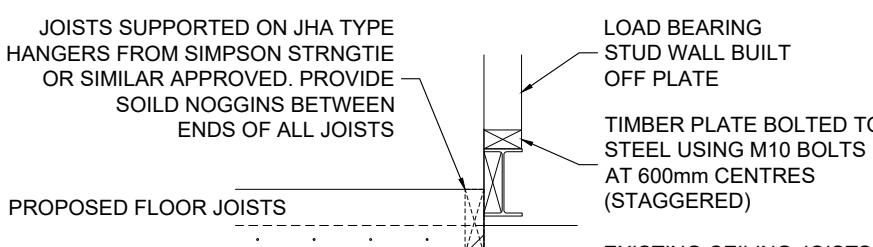
DETAIL 14

STEEL BEAM TO STEEL BEAM

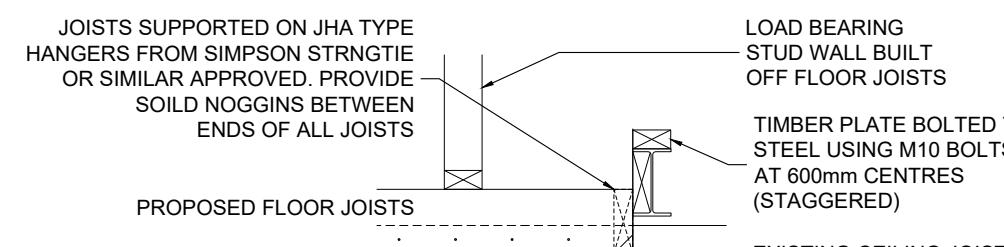


DETAIL 15

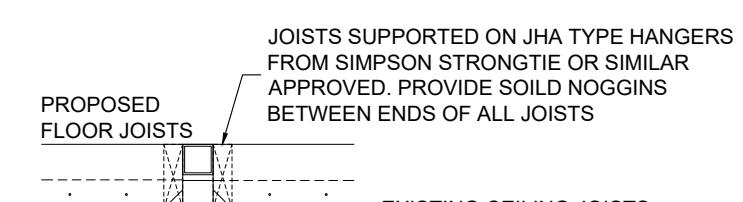
STEEL BEAM TO STEEL BEAM



DETAIL 16

ATTIC CONVERSION BEAM  
DETAIL

DETAIL 17

ATTIC CONVERSION BEAM  
DETAIL

DETAIL 18

ATTIC CONVERSION BEAM  
DETAIL

Client: Ruislip Manor Cottage Society

Address: Green Walk Garages Ruislip HA4 8HJ

Drawing title: Structural details

Project No: 23076

Date: 15-07-24

Drawn by: JG

Scale 1:20 @ A3

Drawing No: SK01

**STAAC** 

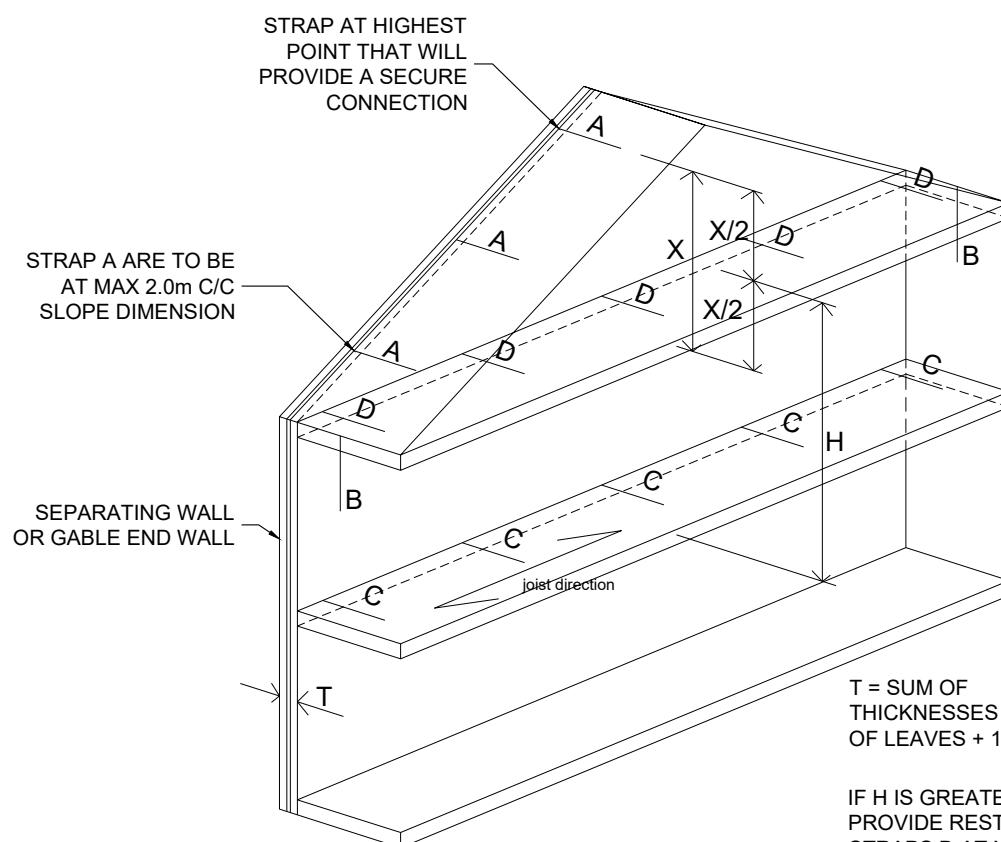
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# TYPICAL DETAILS SHEET (where applicable)

THESE GENERIC DETAILS ARE FOR ON SITE GUIDANCE ONLY - EXACT SETTINGS OUT IS TO BE DETERMINED ON SITE TO THE SATISFACTION OF THE ARCHITECT / CLIENT - REPORT TO ENGINEER FOR ANY SITE SPECIFICS DETAILS NOT COVERED



**DETAIL 19**  
DIAGRAMMATIC STRAP LOCATION  
REFER ALSO TO DETAILS 20 TO 23

RAFTERS NOTCHED TO PROVIDE HORIZONTAL BEARINGS (MAX 1/3RD DEPTH)

TIMBER PLATE BOLTED TO STEEL USING M10 BOLTS AT 600mm CENTRES (STAGGERED)

CEILING JOISTS SUPPORTED OFF "PURLIN" BEAM VIA FULLY NAILED JHA TUPE HANGERS - JOISTS TO BE WELL SPIKED TO RAFTERS TO TIE THE ROOF

**DETAIL 24**  
"PURLIN" BEAM DETAIL

RAFTES NOTCHED TO PROVIDE HORIZONTAL BEARINGS OFF HANGERS (MAX 1/3 RD DEPTH)

**DETAIL 25**  
RIDGE BEAM

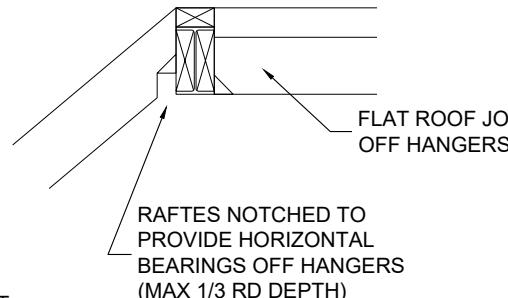
TIMBER PLATE BOLTED TO STEEL USING M10 BOLTS AT 600mm CENTRES (STAGGERED)

RAFTES NOTCHED TO PROVIDE HORIZONTAL BEARINGS OFF HANGERS (MAX 1/3 RD DEPTH)

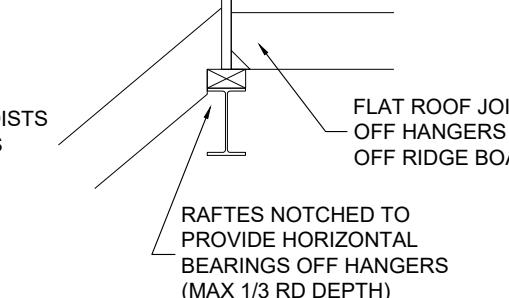
**DETAIL 26**  
RIDGE BEAM

47 x 97mm TIMBER WELL SPIKED TO EXISTING RAFTERS, SUPPORTED OFF BEAM

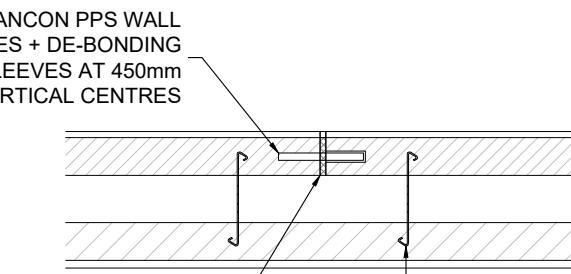
**DETAIL 27**  
RIDGE BEAM



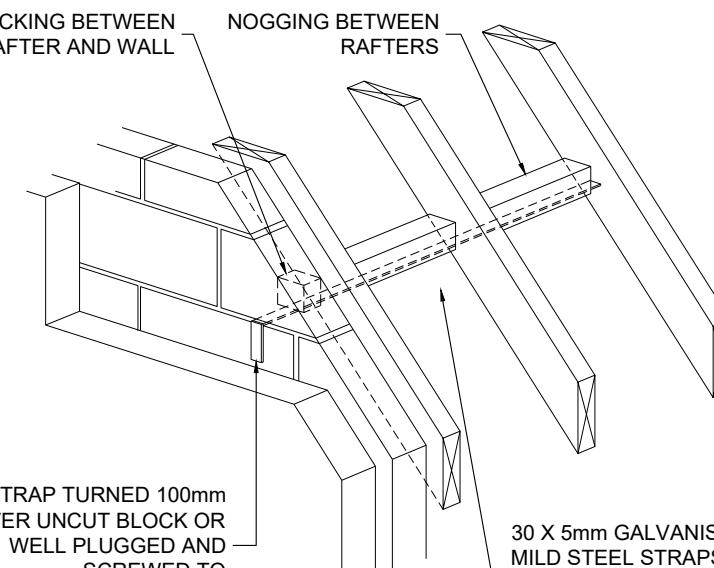
**DETAIL 28**  
RIDGE BEAM



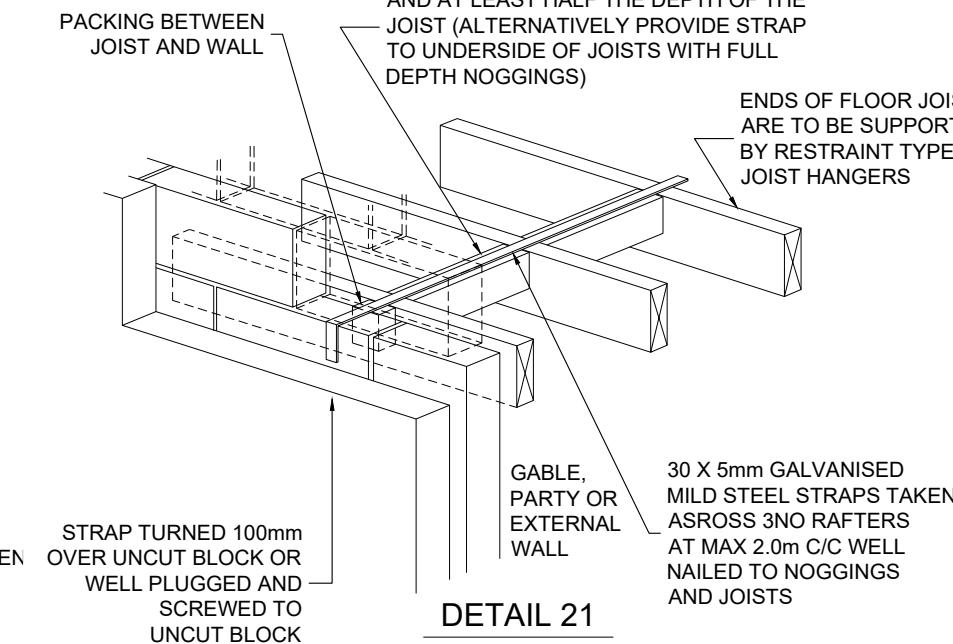
**DETAIL 29**  
RIDGE BEAM



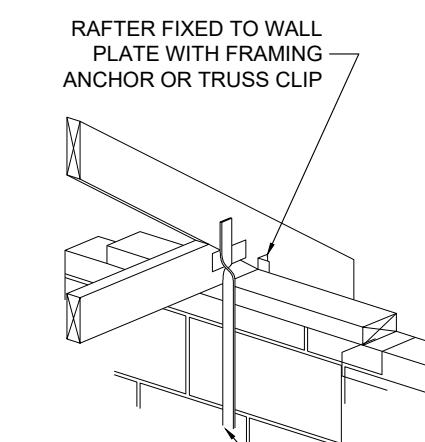
**DETAIL 30**  
TYPICAL MOVEMENT JOINT DETAIL



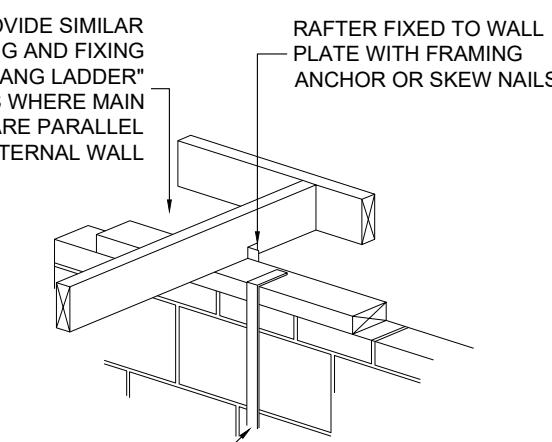
**DETAIL 20**  
STRAPPING DETAIL



**DETAIL 21**  
STRAPPING DETAIL (TYPE D SIMILAR)



**DETAIL 22**  
STRAPPING DETAIL - PITCHED ROOF



**DETAIL 23**  
STRAPPING DETAIL - FLAT ROOF

Client: Ruislip Manor Cottage Society

Address: Green Walk Garages Ruislip HA4 8HJ

Drawing title: Structural details

Project No: 23076

Date: 15-07-24

Drawn by: JG

Scale 1:20 @ A3

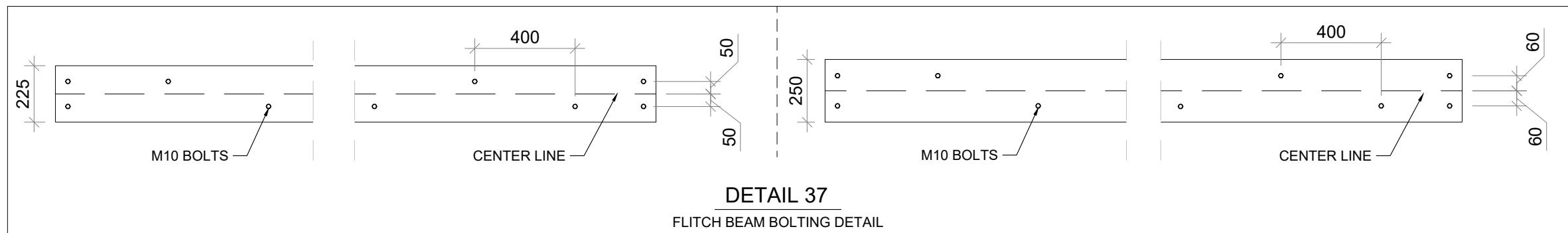
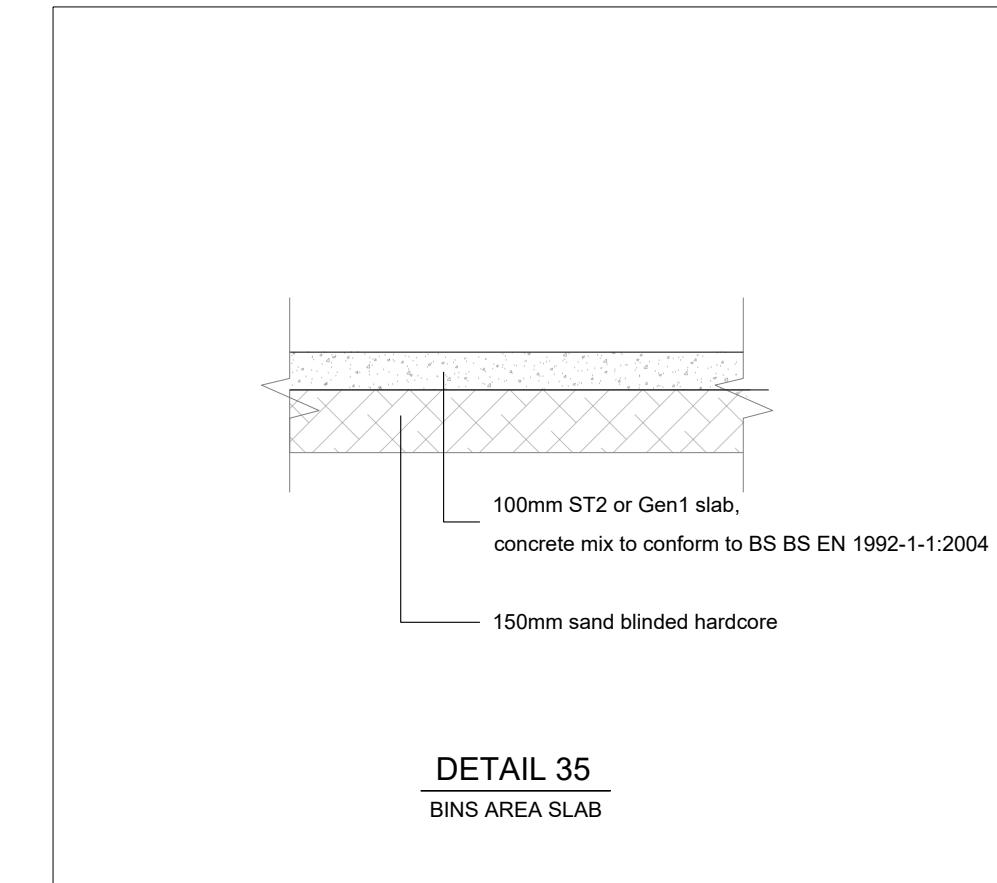
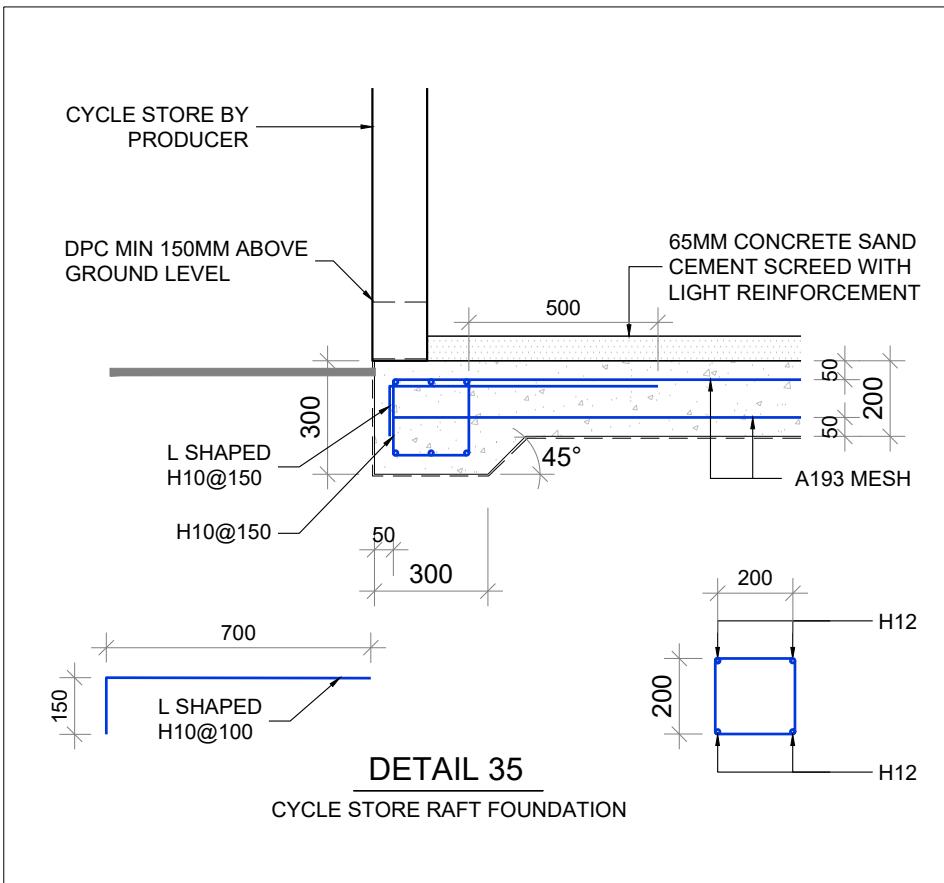
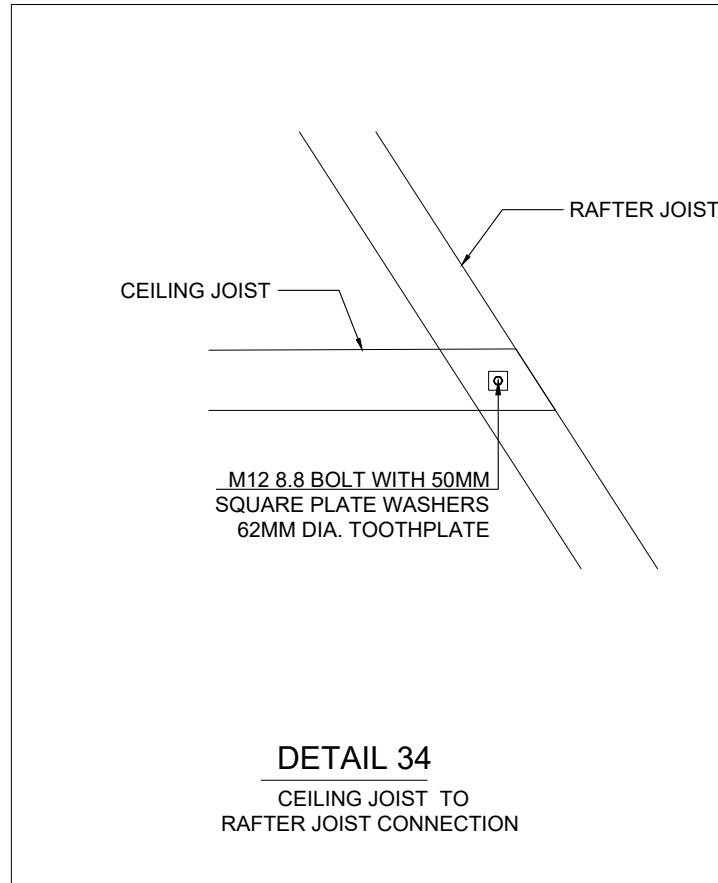
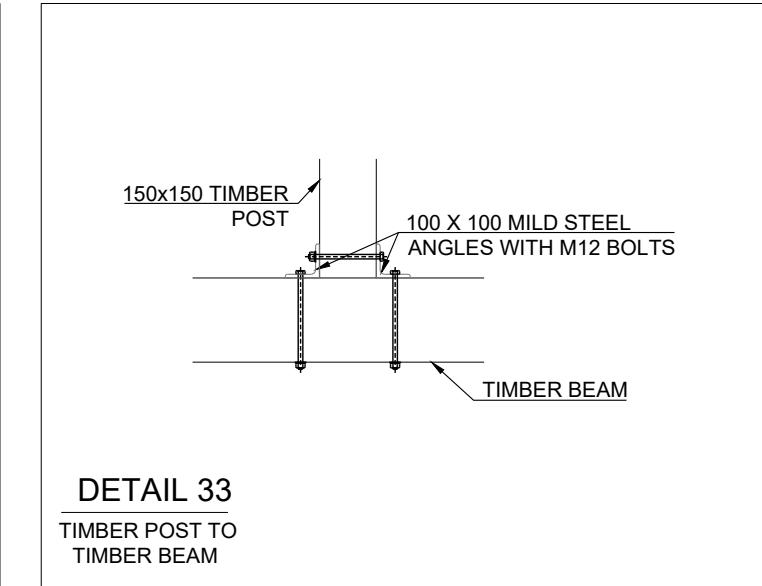
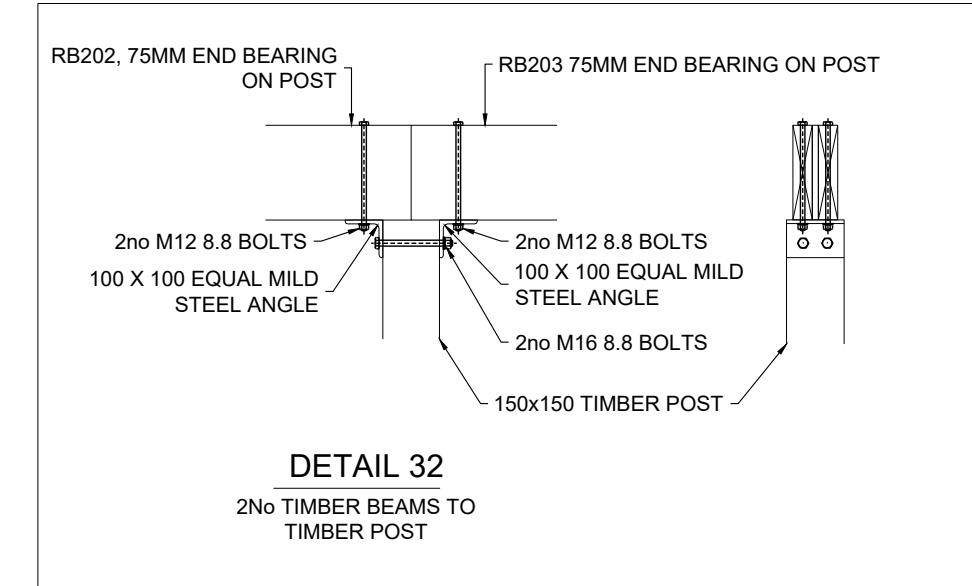
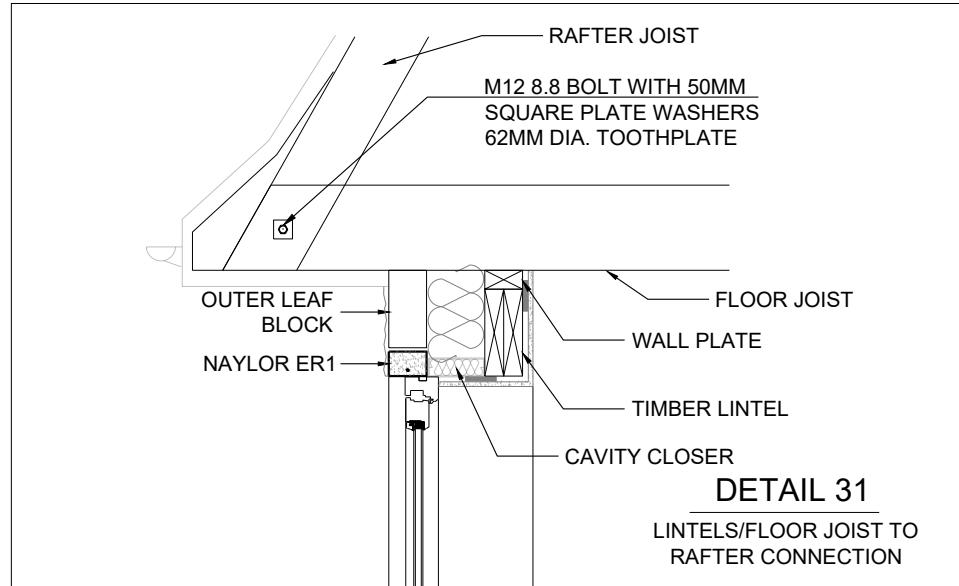
Drawing No: SK02

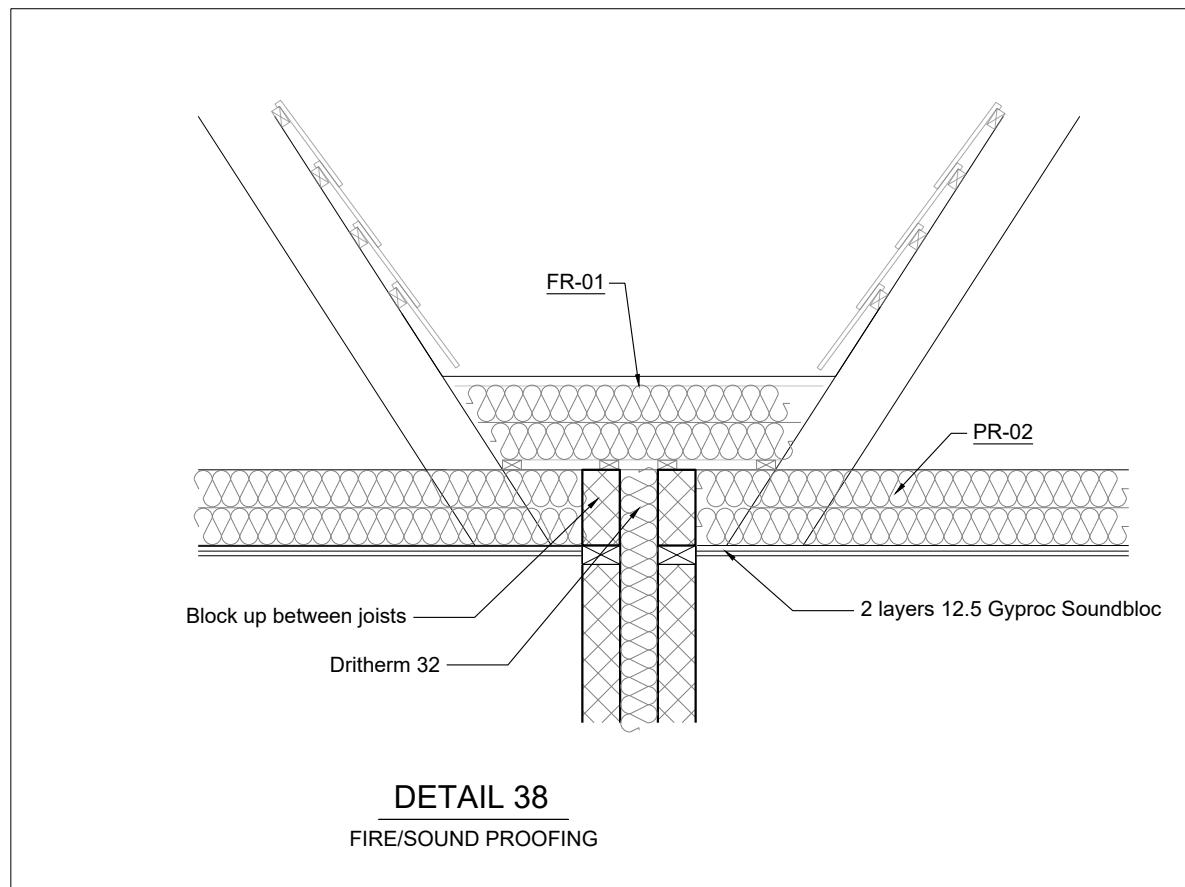
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Client: Ruislip Manor Cottage Society  
 Address: Green Walk Garages Ruislip HA4 8HJ  
 Drawing title: Structural details

Project No: 23076  
 Date: 15-07-24  
 Drawn by: JG  
 Drawing No: SK04  
 Scale 1:20 @ A3

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**GENERAL SPECIFICATIONS (USE WHERE APPLICABLE)****CDM REGULATIONS 2015**

The client must abide by the Construction Design and Management Regulations 2015. The client must appoint a contractor, if more than one contractor is to be involved, the client will need to appoint (in writing) a principal designer (to plan, manage and coordinate the planning and design work) and a principal contractor (to plan, manage and coordinate the construction and ensure there are arrangements in place for managing and organising the project).

**Domestic clients**

The domestic client is to appoint a principal designer and a principal contractor when there is more than one contractor, if not your duties will automatically transferred to the contractor or principal contractor.

The designer can take on the duties, provided there is a written agreement between you and the designer to do so.

The Health and Safety Executive is to be notified as soon as possible before construction work starts if the works:

(a) Last longer than 30 working days and has more than 20 workers working simultaneously at any point in the project.

Or:

(b) Exceeds 500 person days.

**PARTY WALL ACT**

The owner, should they need to do so under the requirements of the Party Wall Act 1996, has a duty to serve a Party Structure Notice on any adjoining owner if building work on, to or near an existing Party Wall involves any of the following:

- Support of beam
- Insertion of DPC through wall
- Raising a wall or cutting off projections
- Demolition and rebuilding
- Underpinning
- Insertion of lead flashings
- Excavations within 3 metres of an existing structure where the new foundations will go deeper than adjoining foundations, or within 6 metres of an existing structure where the new foundations are within a 45 degree line of the adjoining foundations.

A Party Wall Agreement is to be in place prior to start of works on site.

**THERMAL BRIDGING**

Care shall be taken to limit the occurrence of thermal bridging in the insulation layers caused by gaps within the thermal element, (i.e. around windows and door openings). Reasonable provision shall also be made to ensure the extension is constructed to minimise unwanted air leakage through the new building fabric.

**MATERIALS AND WORKMANSHIP**

All works are to be carried out in a workmanlike manner. All materials and workmanship must comply with Regulation 7 of the Building Regulations, all relevant British Standards, European Standards, Agreement Certificates, Product Certification of Schemes (Kite Marks) etc. Products conforming to a European technical standard or harmonised European product should have a CE marking.

**DEMOLITION**

Measures to be put in place during and after the demolition to ensure the protection of the public, public amenities and adjoining properties.

Such measures to include:

- The shoring of adjoining buildings.
- The control of dust and noise generation.
- The weatherproofing of any parts of adjoining buildings which are left exposed by the demolition.
- The repairing and making good any damage to any adjacent building effected by the demolition.
- The removal of material or rubbish resulting from the clearance and demolition of the site.
- The disconnection, sealing or removal of any drain or sewer, as required.
- The making good of any disturbed ground.
- Any arrangements necessary for the disconnection off all services (e.g. gas, water, electricity).

Consultation with the Health and Safety Executive, and Fire Authority should be sought if burning structures or materials on site.

If the demolition is more than 50m<sup>3</sup> in volume a formal notice of demolition is to be given to building control at least six weeks before any demolition work starts, in accordance with The Building Act 1984: Sections 80-83.

Consultation to be undertaken with the occupiers of adjacent buildings where applicable and a Party Wall agreement put in place. A planning application to demolish to be made where required.

All demolition work to comply with the Construction (Design and Management) Regulations 2015 and a Health and Safety plan is to be provided by the Principal Contractor.

**SITE INVESTIGATION**

A survey of the site is to be carried out by a suitably qualified person including an initial ground investigation, a desk study and a walk over survey. A copy of all reports and surveys to be sent to building control for approval before works commence on site.

Any asbestos, contaminated soil or lead paint found on the site is to be removed by a specialist. Asbestos is to be dealt with in accordance with the Control of Asbestos Regulations 2006.

**SITE PREPARATION**

Ground to be prepared for new works by removing all unsuitable material, vegetable matter and tree or shrub roots to a suitable depth to prevent future growth. Seal up, cap off, disconnect and remove existing redundant services as necessary. Reasonable precautions must also be taken to avoid danger to health and safety caused by contaminants and ground gases, e.g. landfill gases, radon, vapours etc. on or in the ground covered, or to be covered by the building.

**HEALTH AND SAFETY**

The contractor is reminded of their liability to ensure due care, attention and consideration is given in regard to safe practice in compliance with the Health and Safety at Work Act 1974.

**BE-01 - BEAMS**

Supply and install new structural elements such as new beams, roof structure, floor structure, bearings, and padstones in accordance with the Structural Engineer's calculations and details. New steel beams to be encased in 12.5mm Gyproc FireLine board with staggered joints, Gyproc FireCase or painted in Nullifire S or similar intumescent paint to provide 1/2 hour fire resistance as agreed with Building Control. All fire protection to be installed as detailed by specialist manufacturer.

**LN-01 - LINTELS**

For uniformly distributed loads and standard 2 storey domestic loadings only. Lintel widths are to be equal to wall thickness. All lintels over 750mm sized internal door openings to be 65mm deep pre-stressed concrete plank lintels. 150mm deep lintels are to be used for 900mm sized internal door openings. Lintels to have a minimum bearing of 150mm on each end. Any existing lintels carrying additional loads are to be exposed for inspection at commencement of work on site. All pre-stressed concrete lintels to be designed and manufactured in accordance with BS 8110, with a concrete strength of 50 or 40 N/mm<sup>2</sup> and incorporating steel strands to BS 5896 to support loadings assessed to BS 5977 Part 1.

For other structural openings provide proprietary insulated steel lintels suitable for spans and loadings in compliance with Approved Document A and lintel manufacturers standard tables. Stop ends, DPC trays and weep holes to be provided above all externally located lintels.

Independent lintels to have an insulated cavity closure between the inner and outer lintel.

**STP-01 - STRAPPING FOR PITCHED ROOF**

Gable walls should be strapped to roofs at 2m centres. All external walls running parallel to roof rafters to be restrained at roof level using 1000mm x 30mm x 5mm galvanised mild steel horizontal straps or other approved to BSEN 845-1 built into walls at max 2000mm centres and to be taken across minimum 3 rafters and screw fixed. Provide solid noggin between rafters at strap positions. All wall plates to be 100 x 50mm fixed to inner skin of cavity wall using 30mm x 5mm x 1000mm galvanized metal straps or other approved to BSEN 845-1 at maximum 2m centres.

**STP-02 - STRAPPING OF FLOORS**

Provide lateral restraint where joists run parallel to walls, floors are to be strapped to walls with 1000mm x 30mm x 5mm galvanised mild steel straps or other approved in compliance with BS EN 845-1 at max 2.0m centres, straps to be taken across minimum of 3 joists. Straps to be built into walls. Provide 38mm wide x 1/4 depth solid noggin between joists at strap positions.

**STP-03 - FLAT ROOF RESTRAINT**

100mm x 50mm C16 grade timber wall plates to be strapped to walls with 1000mm x 30mm x 5mm galvanised mild steel straps at maximum 2.0m centres fixed to internal wall faces.

**WSP-01 - WALLS BELOW GROUND**

All new walls to have Class A blockwork below ground level or alternatively semi engineering brickwork in 1:4 masonry cement or equal approved specification. Cavities below ground level to be filled with lean mix concrete min 225mm below damp proof course. Or provide lean mix backfill at base of cavity wall (150mm below damp course) laid to fall to weepholes.

**WSP-02 - DPC**

Provide horizontal strip polymer (hyload) damp proof course to both internal and external skins, DPC to be placed a minimum 150mm above external ground level. New DPC to be made continuous with existing DPC's and with floor DPM. Vertical DPC to be installed at all reveals where cavity is closed.

**WSP-03 - WALL TIES**

All walls constructed using stainless steel vertical twist type retaining wall ties built in at 750mm ctrs horizontally, 450mm vertically and 225mm ctrs at reveals and corners in staggered rows. Wall ties to be suitable for cavity width and in accordance with BS EN 84.

Wall ties for cavities over 150mm to be suitable for cavity width, and installed as manufacturer's details.

**WSP-04 - CAVITIES**

Provide cavity trays over openings. All cavities to be closed at eaves and around openings using Thermabate or similar non combustible insulated cavity closers. Provide vertical DPCs around openings and abutments. All cavity trays must have 150mm upstands and suitable cavity weep holes (min 2) at max 900mm centres.

**WSP-06 - CAVITY BARRIERS**

30 minute fire resistant cavity barriers to be provided at the edges of cavities including around openings, at tops of walls, gable end walls, vertically at junctions with separating walls and horizontally at separating floors, separating line in roof space. Cavity trays to be provided over barrier where required. Trays and cavity barriers to be installed according to manufacturer's details.

**WSP-07 - MOVEMENT JOINTS**

Movement joints to be provided at the following maximum spacing:

Clay brickwork - 12m.

Calcium silicate brick - 7.5-9m.

Lightweight concrete block - density not exceeding 1,500kg/m<sup>3</sup> - 6m.

Dense concrete block - density exceeding 1,500kg/m<sup>3</sup> - 7.5-9m.

Any masonry in a parapet wall (length to height ratio greater than 3:1) - half the above spacings and 1.5m from corners.

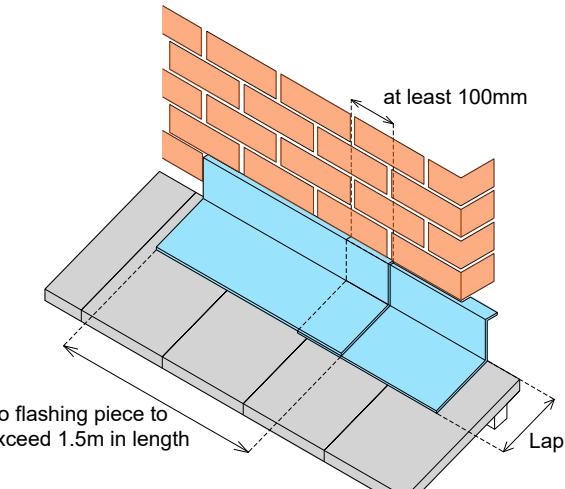
Movement joint widths for clay bricks to be not less than 1.3mm/m i.e. 12m = 16mm and for other masonry not less than 10mm.

Additional movement joints may be required where the aspect ratio of the wall (length :height) is more than 3:1.

Considerations to be given to BS EN 1996-1-2:2005 Eurocode 6. Design of masonry structure.

**FLA-01 - LEAD WORK AND FLASHINGS**

All lead flashings, any valleys or soakers to be Code 5 lead and laid according to Lead Development Association. Flashings to be provided to all jambs and below window openings with welded upstands. Joints to be lapped min 150mm and lead to be dressed 200mm under tiles, etc. All work to be undertaken in accordance with the Lead Development Association recommendations.



Client:	Ruislip Manor Cottage Society
Address:	Green Walk Garages Ruislip HA4 8HJ
Project No:	23076
Date:	15-07-24
Drawn by:	JG
Scale 1:20 @ A3	
Drawing No:	SP01

Drawing title: Specifications

**FLA-02 - LEAD VALLEYS**

Lead-lined valleys to be formed using Code 5 lead sheet. Valley lead and two tiling fillets to be supported on min 19mm thick and 225mm wide marine ply valley boards on either side of the rafters. Lead to be laid in lengths not exceeding 1.5m with min 150mm lap joints and be dressed 200mm under the tiles.

Roofing tiles to be bedded in mortar placed on a tile slip to prevent direct contact. Valley to have a minimum 100mm wide channel (125mm minimum for pitches below 30°).

All work to be in accordance with the roof cladding manufacturers and the Lead Development Association recommendations.

**ST-01 - STAIRS**

Dimensions to be checked and measured on site prior to fabrication of stairs. Timber stairs to comply with BS585 and with Part K of the Building Regulations. Max rise 220mm, min going 220mm. Two risers plus one going should be between 550 and 700mm. Tapered treads to have going in centre of tread at least the same as the going on the straight. Min 50mm going of tapered treads measured at narrow end. Pitch not to exceed 42 degrees. The width and length of every landing should be at least as great as the smallest width of the flight. Doors which swing across a landing at the bottom of a flight should leave a clear space of at least 400mm across the full width of the flight. Min 2.0m headroom measured vertically above pitch line of stairs and landings. Handrail on staircase to be 900mm above the pitchline, handrail to be at least one side if stairs are less than 1m wide and on both sides if they are wider. Ensure a clear width between handrails of minimum 600mm. Balustrading designed to be unclimbable and should contain no space through which a 100mm sphere could pass. Allow for all structure as designed by a Structural Engineer.

**EL-01 - ELECTRICAL**

All electrical work required to meet the requirements of Part P (electrical safety) must be designed, installed, inspected and tested by a competent person registered under a competent person self certification scheme such as BRE certification Ltd, BSI, NICEIC Certification Services or Zurich Ltd. An appropriate BS7671 Electrical Installation Certificate is to be issued for the work by a person competent to do so. A copy of a certificate will be given to Building Control on completion.

**LG-01 - INTERNAL LIGHTING**

Internal energy efficient light to be fitted as calculated within the dwelling primary energy rate and dwelling emissions rate for account for the efficacy of lamps.

Provide low energy light fittings lamps with a luminous efficacy better than 80 lamp lumens per watt. All fixed lighting to have lighting capacity (lm) 185 x total floor area.

**LG-02 - FIXED EXTERNAL LIGHTING**

External light fittings to be fitted as calculated in the DER and in compliance with the Domestic Building Services Compliance Guide.

Light fitting to be either:

a. lamp capacity not greater than 100 lamp-watts per light fitting and provided with automatic movement detecting devices (PIR) and automatic daylight sensors ensuring lights shut off automatically when not required.

Or

b. lamp efficacy greater than 45 lumens per circuit-watt; fitted with manual controls and automatic day light cut-off sensors so that lights switch off when daylight is sufficient.

**HE-01 - GAS HEATING**

All radiators to have TRVs. Heating system to be designed, installed, tested and fully certified by a GAS SAFE registered specialist. All work to be in accordance with the Local Water Authorities bye laws, the Gas Safety (Installation and Use) Regulations 1998 and IEE Regulations.

**HE-02 - NEW GAS BOILER**

Heating and hot water will be supplied via a wall mounted condensing vertical balanced flue pressurised boiler with a minimum efficiency of 91% (as defined in ErP(1))

The energy performance of the new components to be assessed. The results should be recorded and given to the building owner.

All accessible pipes to be insulated to the standards in Table 4.4 Approved Document L.

All parts of the system including pipework and emitters to be sized to allow the space heating system to operate effectively and in a manner that meets the heating needs of the dwelling, at a maximum flow temperature of 55°C or lower.

No combustible materials within 50mm of the flue. Rooms to be fitted with thermostatic radiator valves and all necessary zone controls and boiler control interlocks. The system will be installed, commissioned and tested by a GAS SAFE Registered Specialist and a certificate issued that demonstrates that the installation complies with the requirements of PART L. All work to be in accordance with the Local Water Authorities bye laws, the Gas Safety (Installation and Use) Regulations 1998 and IEE Regulations.

Gas-fired combination boilers installed in existing dwellings, to have at least one of the following energy efficiency measures, appropriate to the system:

- Flue gas heat recovery.
- Weather compensation.
- Load compensation.
- Smart thermostat with automation and optimisation.

Battery operated or mains-wired Carbon monoxide alarm to be fitted between 1m and 3m of the boiler in compliance with Approved Document J.

**FRE-02 - ESCAPE WINDOWS**

Provide emergency egress windows to any newly created first floor habitable rooms and ground floor inner rooms. Windows to have an unobstructed openable area that complies with:

- minimum height of 450mm and minimum width of 450mm.
- minimum area 0.33m<sup>2</sup>.
- the bottom of the openable area should be not more than 1100mm above the floor.

The window should enable the person to reach a place free from danger from fire.

**FS-01 - SMOKE DETECTION**

Mains operated linked smoke alarm detection system to BS EN 14604 and BS 5839-6:2019 to at least a Grade D category LD3 standard to be mains powered with battery back up to be installed. At least one smoke detector to be provided in each hallway and landing. In hallways exceeding 7.5m in length, no point within the hallway should exceed 7.5 m from the nearest detector and no bedroom door should be further than 3 m from the nearest smoke alarm. If ceiling mounted they should be 300mm from the walls and light fittings. Where the kitchen area is not separated from the stairway or circulation space by a door, there should be an interlinked heat detector in the kitchen.

Grade D2, LD2 standard alarms to be provided if required by BCO.

**GLA-01 - ROOF LIGHTS**

A glazed unit installed on a flat roof, min U-value of 2.2 W/m<sup>2</sup>K.

Roof-lights to be double glazed with 16mm argon gap and soft low-E glass. Window Energy Rating to be Band C or better. Roof lights to be fitted in accordance with manufacturer's instructions with rafters doubled up to sides and suitable flashings etc.

**GLA-02 - SAFETY GLAZING**

All glazing in critical locations to be toughened or laminated safety glass to BS 6206, BS EN 14179 or BS EN ISO 12543-1 and Part K (Part N in Wales) of the current Building Regulations, i.e. within 1500mm above floor level in doors and side panels within 300mm of door opening and within 800mm above floor level in windows.

**GLA-03 - WINDOWS**

Windows to be double glazed with argon filled gap and with a soft coat low-E glass. Window Energy Rating to be Band A or better and to achieve U-value of 1.2 W/m<sup>2</sup>K.

Insulated plasterboard to be used in reveals to abut jambs and to be considered within reveal soffits. Fully insulated and continuous cavity closers to be used around reveals. Windows and door frames to be taped to surrounding openings using air sealing tape.

**GLA-04 - DOORS**

Opaque doors (less than 30% glazed area) and semi-glazed doors (30-60% glazed area) to achieve U-value of 1.0 W/m<sup>2</sup>K.

Glazed doors with greater than 60% glazed area to achieve U-value of 1.2 W/m<sup>2</sup>K.

Glazed areas to be double glazed with argon gap and soft low-E glass.

Glass to be toughened or laminated safety glass to BS 6206, BS EN 14179 or BS EN ISO 12543-1:2011 and Part K (Part N in Wales) of the current Building Regulations. Insulated plasterboard to be used in reveals to abut jambs and to be considered within reveal soffits. Fully insulated and continuous cavity closers to be used around reveals.

Windows and door frames to be taped to surrounding openings using air sealing tape.

**VEN-01 - BACKGROUND VENTILATION**

Controllable background ventilation at least 1700mm above floor level to be provided to habitable rooms and kitchens at a rate of min 8,000mm<sup>2</sup>, and to bathrooms at a rate of min 4000mm<sup>2</sup>. Total number of ventilators installed in a dwellings habitable rooms to be at least 4 ventilators for one bedroom dwellings and 5 ventilators for dwellings with more than one bedroom.

Background ventilators to be tested to BS EN 13141-1.

Background ventilator equivalent area and operation to be measured and recorded.

Noise attenuating background ventilators should be fitted to facades with sustained loud noise.

**VEN-02 - PURGE VENTILATION**

Minimum total area of opening in accordance with Table 1.4 Approved Document F1.

Hinged or pivot windows with an opening angle of 15 to 30 degrees to have an openable area in excess 1/10 of the floor area of the room.

Sash windows, external doors or hinged pivot windows with an opening angle of equal to or greater than 30 degrees to have an openable area in excess of 1/20 of the floor area of the room.

Purge ventilation should be capable of extracting at least 4 air changes per hour per room directly to the outside.

Internal doors should be provided with a 10mm gap below the door to aid air circulation.

Higher purge ventilation rates may be required in order to demonstrate compliance with Part O.

**VEN-03 - EXTRACT FOR SHOWER ROOM**

Provide mechanical extract ventilation to shower room ducted to external air capable of extracting at a rate of not less than 15 litres per second. Vent to be connected to light switch and to have 15 minute over run if no window in the room. Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic Ventilation Compliance Guide. Intermittent extract fans to BS EN 13141-4. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body.

**VEN-04 - EXTRACT TO BATHROOM**

Bathroom to have mechanical vent ducted to external air to provide min 15 litres / sec extraction. Vent to be connected to light switch and to have 15 minute over run if no window in room. Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic Ventilation Compliance Guide. Intermittent extract fans to BS EN 13141-4. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body.

**VEN-05 - EXTRACT TO W/C**

W/C to have mechanical ventilation ducted to external air with an extract rating of 15l/s operated via the light switch. Vent to have a 15min overrun if no window in room. Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic Ventilation Compliance Guide. Intermittent extract fans to BS EN 13141-4. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body.

**VEN-06 - EXTRACT TO KITCHEN**

Kitchen to have mechanical ventilation with an extract rating of 60l/sec or 30l/sec if adjacent to hob to external air, sealed to prevent entry of moisture. Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic Ventilation Compliance Guide. Intermittent extract fans to BS EN 13141-4. Cooker hoods to BS EN 13141-3. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body. Height of Cooker hood to be as manufacturer's specification or between 650mm and 750mm

**DR-01 - UNDERGROUND FOUL DRAINAGE**

Underground drainage to consist of 100mm diameter UPVC proprietary pipe work to give a 1:40 fall. Surround pipes in 100mm pea shingle. Provide 600mm suitable cover (900mm under drives). Shallow pipes to be covered with 100mm reinforced concrete slab over compressible material. Provide rodding access at all changes of direction and junctions. All below ground drainage to comply with BS EN 1401-1.

**DR-02 - INSPECTION CHAMBERS**

Underground quality proprietary UPVC 450mm diameter inspection chambers to be provided at all changes of level, direction, connections and every 45m in straight runs. Inspection chambers to have bolt down double sealed covers in buildings and be adequate for vehicle loads in driveways.

**DR-03 - ABOVE GROUND DRAINAGE**

All new above ground drainage and plumbing to comply with BS EN 12056-2 for sanitary pipework. All drainage to be in accordance with part H of the Building Regulations. Wastes to have 75mm deep anti vac bottle traps and rodding eyes to be provided at changes of direction.

Size of wastes pipes and max length of branch connections (if max length is exceeded then anti vacuum traps to be used)

Wash basin - 1.7m for 32mm pipe 3m for 40mm pipe

Bath/shower - 3m for 40mm pipe 4m for 50mm pipe

W/c - 6m for 100mm pipe for single WC

All branch pipes to connect to 110mm soil and vent pipe terminating min 900mm above any openings within 3m.

Or to 110mm upvc soil pipe with accessible internal air admittance valve complying with BS EN 12380, placed at a height so that the outlet is above the trap of the highest fitting.

Waste pipes not to connect within 200mm of the WC connection. Supply hot and cold water to all fittings as appropriate.

**DR-04 - SOIL AND VENT PIPE**

Svp to be extended up in 110mm dia UPVC and to terminate min 900mm above any openings within 3m. Provide a long radius bend at foot of SVP. Internal soil vent pipes to be wrapped in 25mm unfaced mineral fibre and enclosed in minimum two layers of 12.5mm plasterboard (15g/m<sup>2</sup> mass per unit area) to provide adequate sound proofing. Soil and vent passing through floors to be enclosed in ducts comprising of timber framing faced with fire line plasterboard to achieve half hour fire resistance. All ducts to be fire stopped at floor levels using mineral wool quilt packing.

**DR-05 - AUTOMATIC AIR VALVE**

Ground floor fittings from WC to be connected to new 110mm UPVC soil pipe with accessible internal air admittance valve complying with BS EN 12380, placed at a height so that the outlet is above the trap of the highest fitting and connected to underground quality drainage encased with pea gravel to a depth of 150mm.

**DR-06 - PIPEWORK THROUGH WALLS**

Where new pipework passes through external walls the pipe work is to be provided with 'rocker pipes' at a distance of 150mm either side of the wall face. The 'rocker pipes' must have flexible joints and be a maximum length of 600mm.

Alternatively provide 75mm deep pre-cast concrete plank lintels over drain to form opening in wall to give 50mm space all round pipe: mask opening both sides with rigid sheet material and compressible sealant to prevent entry of fill or vermin.

**PART L (CONSERVATION OF FUEL AND POWER)****ENERGY PERFORMANCE**

The below to be submitted to building control before the work starts:

- Target primary energy rate and the dwelling primary the emission rate.
- The target emission rate and the dwelling emission rate.
- The target fabric energy efficiency rate and the dwelling fabric energy efficiency rate.
- A list of specifications to which the dwelling is constructed.

The dwelling primary energy rate, dwelling emission rate and dwelling fabric energy efficiency rate must not exceed the target primary energy rate, target emission rate and target fabric energy efficiency rate, respectively.

No later than 5 days after the work has been completed building control to be provided with:

- The as-built target primary energy rate and as-built dwelling primary energy rate.
- The as-built target emission rate and as-built dwelling emission rate.
- The as-built target fabric energy efficiency rate and as-built dwelling fabric energy efficiency rate.
- A list of specifications used in the as-built calculations, and whether the specifications have changed from those used in the design stage calculations.

All to be calculated using the Standard Assessment Procedure for Energy Rating of Dwellings, SAP 10.

BREL report to be given to building control along with photographic evidence of compliance.

Energy Performance Certificate (EPC) accompanied by a recommendation report in compliance with Regulation 29, is to be given to the owner of the building and submitted to building control, no later than 5 days after the work has been completed.

**PROVIDING INFORMATION**

On completion of the works the owner of the dwelling shall be provided with:

- Information about the fixed building services and on-site electricity generation and their operating and maintenance instructions, including timing and temperature control settings, and a Home User Guide.
- A recommendations report generated with the 'on-construction' energy performance certificate
- A signed copy of the Building Regulations England Part L compliance report (BREL). Information to be easy to understand and in an accessible format.

**THERMAL BRIDGING**

The building fabric to be constructed so that the insulation is reasonably continuous across newly built elements.

Drawings to be provided for junctions to prevent thermal bridging, guidance in Building Research Establishment's BR 497 or other independently assessed thermal junction details to be followed. Before elements are concealed, photographs of the details and an on-site audit to be undertaken to confirm that the designed details have been constructed in line with the guidance in Appendix B.

**COMMISSIONING OF FIXED SERVICES**

All fixed building services to be commissioned and a commissioning plan to be produced identifying:

- systems that need to be tested.
- how these systems will be tested.

Commissioning plan to be given to the building control body with the design stage dwelling primary energy rate, dwelling emissions rate and dwelling fabric energy rate calculation.

At completion commissioning certificate to be given to the building control body confirming that the commissioning plan has been followed and that all systems have been inspected and conform with the design requirements.

**SYSTEM CONTROLS AND ZONING**

Domestic hot water circuits to have:

- time control that is independent of space heating circuits.
- electronic temperature control.

Each room or agreed zone should be provided with thermostatic room controls.

Dwellings with a floor area of 150m<sup>2</sup> or greater to have a minimum of two independently controlled heating circuits.

**LIMITING HEAT LOSSES AND GAINS**

In accordance with Table 4.4 Approved Document L

Insulation to be provided to:

- Primary circulation pipes for domestic hot water.
- Primary circulation pipes for heating circuits where they pass outside the heated living space and voids to be insulated.
- Pipes connected to hot water storage vessels for at least 1m from the point at which they connect to the vessel.

Secondary circulation pipework.

**REPORTING EVIDENCE OF COMPLIANCE**

The Building Regulations England Part L (BREL) report and photographic evidence to be provided to building control and to the building owner.

Photographs to show thermal continuity and quality of insulation to be made available to the energy assessor and building control. One photograph per detail to be provided of the following details:

- At ground floor perimeter edge insulation
- At external door threshold
- Below damp-proof course on external walls
- Ground floor to wall junction
- Structural penetrating elements
- Joist/rafter level
- Eaves and gable edges
- Window positioning in relation to cavity closer or insulation line
- External doorset positioning in relation to cavity closer or insulation line
- Air tightness details where required
- Plant/equipment identification labels, including make/model and serial number
- Primary pipework and continuity of insulation
- Mechanical ventilation ductwork continuity of insulation (for duct sections outside the thermal envelope)

Each image file name to confirm location, date and time and to have a plot number and detail reference.

**PART M4(1) (ACCESS AND USE)  
DWELLING APPROACH**

Provide a level approach to the principal entrance door no steeper than 1:20 and at least 900mm wide, with cross falls no greater than 1:40. Approach surface material to be firm, non-slip and capable of supporting the weight of a wheelchair and its user (loose material such as gravel and shingle would not be suitable).

**RAMPED APPROACH MAX 1:15 (WHERE GRADIENT EXCEEDING 1:20 BUT NOT 1:15)**

Provide a ramped approach to the principal entrance door with a firm, even, non slip surface capable of supporting the weight of a wheelchair and its user (loose material such as gravel and shingle would not be suitable).

Ramp to be at least 900mm wide and with cross falls no greater than 1:40 and a maximum gradient of 1:15. Landings of 1.2m to be provided every 10m. Ensure the top and bottom landing are at least 1.2m clear of any door swing (provide intermediate landings if necessary).

**ACCESSIBLE LEVEL DOOR THRESHOLDS INTO THE BUILDING**

Entrance door to have an accessible level threshold provided with a weather bar (maximum height 15mm) with suitable drainage channel. Landings to have a fall of 1:40-1:60 away from the door. Principal entrance door to have a minimum 775mm clear opening between the door leaf and doorstops.

**INTERNAL CORRIDORS AND DOOR WIDTHS**

Doorway clear opening width and corridor clear passage way width to comply with the following: 750mm or wider doorway – corridor to be 900mm (when approached head on)

750mm doorway – corridor to be 1200mm (when approach is not head on)

775mm doorway – corridor to be 1050mm (when approach is not head on)

800mm doorway – corridor to be 900m (when approach is not head on)

Door and corridor width to comply with Diagram 1.2 and to be measured in accordance with diagram 1.1, Approved Document M.

Any localised obstruction must not occur opposite or close to a doorway, and should not be longer than 2m in length. The corridor must not be reduced below a minimum 750mm width at any point.

**ACCESSIBLE SWITCHES, SOCKETS, CONTROLS ETC**

All electric sockets outlets, controls and switches etc to be positioned between 450mm and 1200mm above floor level.

Accessible consumer units should be fitted with a child proof cover or installed in a lockable cupboard.

**PROVISION OF A GROUND FLOOR WC**

Accessible WC to be provided on the principal entrance storey. A minimum 500mm clear space to be provided either side of the centre of the WC pan and 750mm minimum clear space in front of the pan to allow sufficient space for wheelchair approach and turning. The washbasin and door is to be positioned so as not to impede access or manoeuvrability. Door into WC to be outward opening.

**PART C (CONDENSATION)**

Walls, floors and roof of the building to be designed and constructed so that their structural and thermal performance will not be adversely affected by interstitial condensation, surface condensation or mould growth. Account to be taken of the building's form and orientation in relation to topography, prevailing winds, sunlight and over-shadowing, and the rate at which humidity is generated.

Materials with the highest vapour resistance should be located on the warm side of a thermal element. VCLs to be provided where necessary.

The junctions between elements are designed to Accredited Construction Details or guidance of BRE IP17/01] and BS 5250:2011+A1:2016 Code of practice for control of condensation in buildings to be followed.

**PART E (SOUND PROTECTION)****SOUND TESTING**

Separating walls, floors, stairs and party walls to achieve a performance standard of 45 dB (minimum values for airborne sound insulation to walls, floors and stairs) and 62 dB (maximum values for impact sound insulation to floors and stairs) to demonstrate compliance with Approved Document E1.

Pre completion sound testing to be carried out by a suitably qualified person with appropriate third party accreditation (either UKAS accreditation or be a member of the Association of Noise Consultants Registration Scheme). Test to be carried out once the dwelling is complete but before carpeting and a copy of the test results given to building control.

If any elements were to fail the sound test, remedial works must be undertaken before retesting to the satisfaction of the Building Control Surveyor.

**PART G (HOT AND COLD WATER SUPPLY)****WATER EFFICIENCY**

The estimated water consumption not to exceed 125 litres per person per day in accordance with Approved Document G2 (or 110L per-person if required by the planning conditions). Water Efficiency to be calculated using the 'Water Efficiency Calculator for New Dwellings' or from the list of fitting from the 'Table of fittings' in ADG to comply with part G. The results submitted to building control before works commence on site.

Water calculation to be in compliance with Code for Sustainable Home Level 3/4 as stipulated by the local Planning Authority. Example calculation below;

WC 5/3 (dual flush)

Taps (excluding kitchen taps) 4

Baths 180

Shower 8

Kitchen sink taps 6

Washing machine 8.17 (not supplied)

Dishwasher 1.25 (not supplied)

Water recycling 0 (not supplied)

Predicted per capita consumption (Code) 103.28

**COLD WATER SUPPLY**

There must be a suitable installation for the provision of a wholesome water supply in accordance with Approved Document G. Cold water supply to be provided to washbasins, bidets, baths, WCs, showers, any place where drinking water is drawn off and to any sink provided in areas where food is prepared.

Supply of wholesome cold water to comply with section 67 of the water industry act 1991 and the Water Supply Regulations 2000.

**HOT WATER SUPPLY**

All bathrooms, washbasins, bidet, baths and showers to be provided with adequate hot and cold wholesome water supply in accordance with Approved Document G3. Washbasin with hot and cold water supply to be provided in or adjacent to all rooms containing a WC. A sink with hot and cold wholesome water also to be provided to any area where food is being prepared.

**CONTROL OF WATER TEMPERATURE**

The installation of the hot water supply to comply with Approved Document G3. All baths and showers are to be fitted with an inline thermostatic mixing valve to ensure that the temperature of the water delivered to the bath is limited to 48°C.

**HOT WATER STORAGE SYSTEMS**

Hot water storage systems should be designed and installed in accordance with BS 12897 2006. Hot water vessels, cisterns etc and must be adequately supported.

Any hot water storage system including any cistern or other vessel shall incorporate precautions to ensure suitable pressure relief and that any discharge from any safety devices is safely conveyed to where it is visible but will not cause harm to persons in or about the building. Precautions to be in place to prevent stored water stored exceeding 100°C. Hot water vessels to be fitted with a non self-resetting energy cut out to instantly disconnect the power supply.

Outlets from domestic hot water storage vessels to be fitted with an in-line valve to prevent water temperatures exceeding 60°C. All pipes carrying hot water to be insulated where they pass through unheated spaces. Hot water storage system to be provided with suitable warning labels.

Relevant certificates for the heating system i.e. Benchmark certificate, and commissioning certificates for fixed building services are to be given to the building owner and a copy provided to Building Control on completion.

**PART R (COMMUNICATIONS)**

Developers to install at least one functioning gigabit-capable connection from a network distribution point to a network termination point at each new dwelling.

The Developer to provide gigabit-ready infrastructure necessary for gigabit-capable connections up to a network distribution point, or as close as is reasonably practicable where the developer does not have the right to access land up to that distribution point; and

Subject to a £2,000 cost cap per dwelling, a functioning gigabit-capable connection. Where the developer is unable to secure a gigabit-capable connection within the cost cap, the developer to install the next fastest connection available, provided this can be done without that connection also exceeding the cost cap.

Where the developer has no right to install the infrastructure in or on intervening land and no gigabit-capable connection is being provided, the developer is still required to install infrastructure to one of the following points in order of priority

1. As close as reasonably practicable to a location at which it is likely that a distribution point is to be installed with a 2 year period.
2. Where there is no existing network distribution point to which infrastructure can be built and where there is no likely future location for a distribution point, an access point in or on the building.

A connectivity plan to be submitted to building control as part of the building regulations application.

**PART Q - SECURITY**

Confirmation required that all doors and windows are to be installed in accordance with the advice stated in PAS24:2016 or alternatively comply with the requirements set out in Approved Document Q – Appendix B,

Doors to be manufactured to a design that has been shown by test to meet the requirements of British Standard publication PAS24:2016 or designed and manufactured in accordance with Appendix B or Approved Document Q

For example:

Doors to be fitted with a viewer, door chain and mechanically fixed as the manufacturer's installation guide.

The door set should be manufactured from solid or laminated timber with a minimum density of 600kg/m<sup>3</sup>.

Any panel in the door must be a min15mm thick and suitably secured in place.

The smaller dimension of the panel must be no larger than 230mm in either width or height.

Main front doors should be fitted with multipoint locking system.

Windows:

Any part of a window or doorway, which is within 2m vertically of an accessible level surface such as the ground or basement level, or an access balcony, or windows within 2m vertically of a flat or sloping roof (with a pitch of less than 30 degrees) that is within 3.5m of ground level should be secure windows in accordance with paragraphs 2.2 and 2.3 of Approved Document Q.

Windows to be made to a design that has been shown by test to meet the security requirements of British Standards publication PAS 24:2016

Frames to be mechanically fixed to the structure of the building in accordance with manufacturer's installation instructions.

**PART S - CHARGING OF ELECTRIC VEHICLES**

Electrical vehicle charge point to be provided to any associated car parking spaces. If the connection cost is greater than £3600, two formal quotes to be given to building control, as detailed in Approved Document S, in which case, cable routes for electrical vehicle charge points to be agreed.

**SOLID WASTE STORAGE (REFUSE)**

Bin storage to be in accordance with BS 5906:2005 Code of Practice for waste management in buildings to ensure that there is suitable spaces/enclosures for bins.

Adequate provision shall be made for the collection of waste as required by the Waste Collection Authority.

The new dwelling is to be provided with an area of 1.2m x1.2m for refuse storage containers. Separate containers are to be provided for recycling and non recycling household waste. Waste collections that are less than weekly may require increased capacity as agreed with the Waste Collection Authority. If a communal solid waste storage facility is used, storage to have a combined capacity of 0.25m<sup>3</sup> per dwelling or as agreed with the Waste Collection Authority.

Refuse storage areas to be sited within 25m of the waste collection point or as specified by the Waste Collection Authority, and placed so that the householder does not need to carry refuse more than 30m. Refuse storage areas are to be positioned away from any windows and ventilators and are not to impede access into the dwelling.

**FLOOR PENETRATIONS**

Pipe services and ducts which pass through separating floors should be surrounded with 25mm sound absorbent mineral wool and enclosed in a duct of two layers of Gyproc FireLine board, which has a mass per unit area of at least 15kg/m<sup>2</sup> for their full height. Seal the joint between the casing and ceiling with tape.

Gas services may require ventilation and should be installed in accordance with The Gas Safety (Installation and Use) Regulations 19.

**PIPES PASSING THROUGH SEPARATING WALLS**

Provide adequate fire stopping where pipes pass through walls using proprietary systems including acoustic intumescent sealant, intumescent collars and fire sleeves to ensure the appropriate level of fire and sound resistance is maintained.

**IF-01 - INTERMEDIATE FLOORS**

Joists to be 50mm minimum from chimney breasts. (joist size to structural engineer's details and calculations) Provide min 20mm t and g chipboard or timber board flooring. In areas such as kitchens, utility rooms and bathrooms flooring to be moisture resistant grade in accordance with BS EN 312). Identification marking must be laid upper most to allow easy identification. To upgrade to half hour fire resistance and provide adequate sound insulation lay minimum 150mm Rockwool insulating material or equivalent on chicken wire between joists and extended to eaves. Chicken wire to be fixed to the joists with nails or staples these should penetrate the joists side to a minimum depth of 20mm, in accordance with BRE-Digest 208 1988. Joists spans over 2.5m to be struttled at mid span use 38 x 38mm herringbone strutting or 38mm solid strutting (at least 2/3 of joist depth).

Client: Ruislip Manor Cottage Society  
Address: Green Walk Garages Ruislip HA4 8HJ  
Drawing title: Specifications

Project No: 23076  
Date: 15-07-24  
Drawn by: JG  
Scale 1:20 @ A3  
Drawing No:SP04

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## TF-01 AND GF-01 - TRENCH FOUNDATION AND SUSPENDED BLOCK AND BEAM FLOOR

## TRENCH FOUNDATION

600mm wide trench fill foundations, depth to be agreed on site, concrete mix to conform to BS EN 206-1 and BS 8500-2. All foundations to be a minimum of 1000mm below ground level, exact depth to be agreed on site with Building Control Officer to suit site conditions. All constructed in accordance with 2010 Building Regulations A1/2 and BS 8004:1986 Code of Practice for Foundations. Ensure foundations are constructed below invert level of any adjacent drains. Base of foundations supporting internal walls to be min 600mm below ground level. Sulphate resistant cement to be used if required. Please note that should any adverse soil conditions or difference in soil type be found or any major tree roots in excavations, the Building Control Officer is to be contacted and the advice of a structural engineer should be sought.

## SUSPENDED BLOCK AND BEAM FLOOR

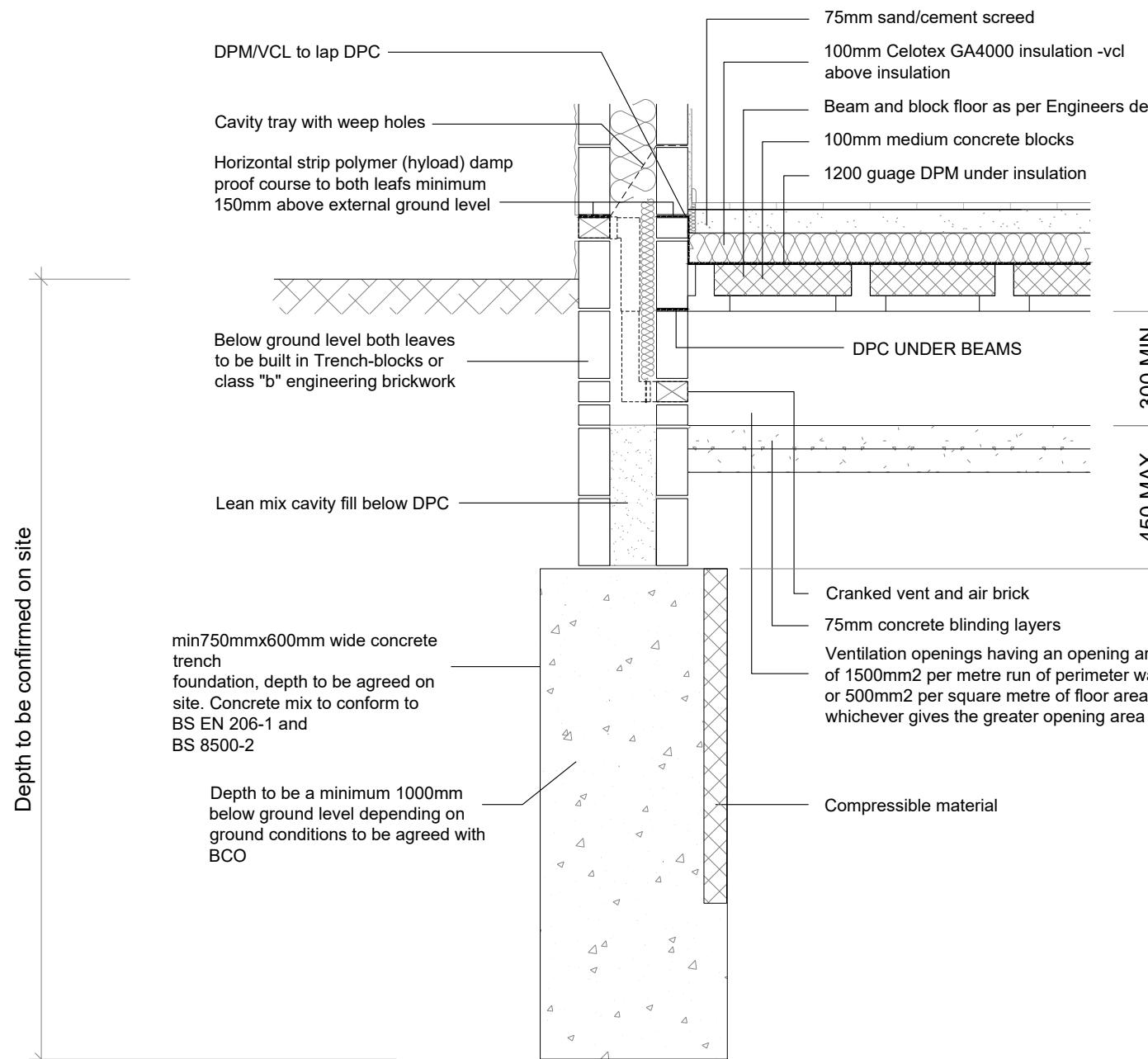
To meet min U value required of 0.18 W/m<sup>2</sup>K

Remove top soil and vegetation, apply weed killer –

The underside of beams not less than 300mm above the top of the ground. PCC beams to be supplied and fixed to beam manufacturer's plan, layout and details (details and calculations to be sent to Building Control and approved before works commence). Minimum bearing 100mm onto DPC and load bearing walls. Provide concrete blocks to BS EN 771, wet and grout all joints with 1:4 cement/sand mix. Provide double beams below non-load bearing partitions. Lay floor insulation over DPM, 100mm Celotex GA4000 applied as a rigid material. 25mm insulation to continue around floor perimeters to avoid thermal bridging.

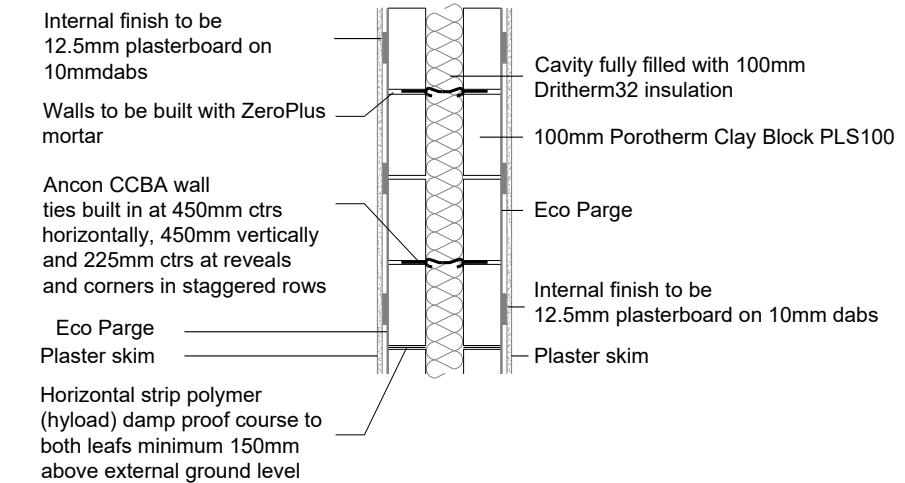
Lay 500g separating layer over insulation and provide 75mm sand/cement screed over and prepare for floor finishes as required.

Ventilation - Provide cross-ventilation of the under floor to outside air by ventilators in at least 2 opposite external walls of the building. Ventilation openings having an opening area of 1500mm<sup>2</sup> per metre run of perimeter wall or 500mm<sup>2</sup> per square metre of floor area, whichever is the greater.

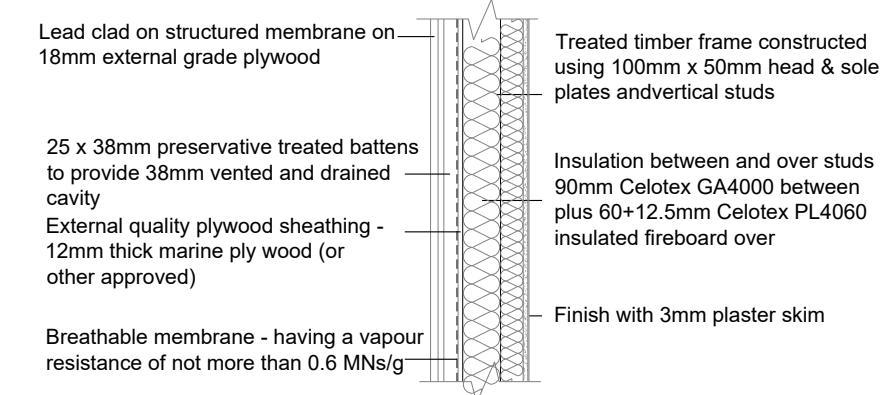


## PW-01 - PARTY WALL

All work as per manufacturer's details



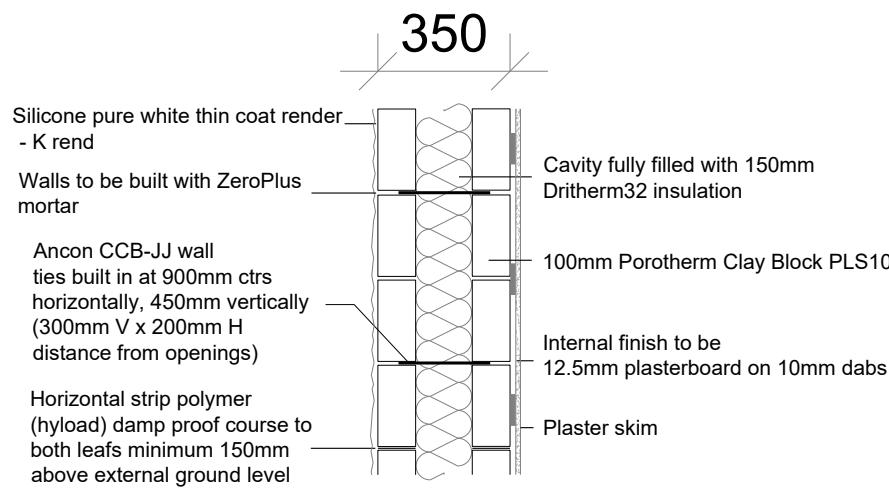
## TW-01- LEAD CLAD TIMBER FRAME WALL (DORMER CHEEK WALL)



## EW-01 - RENDERED FULL FILL CAVITY WALL

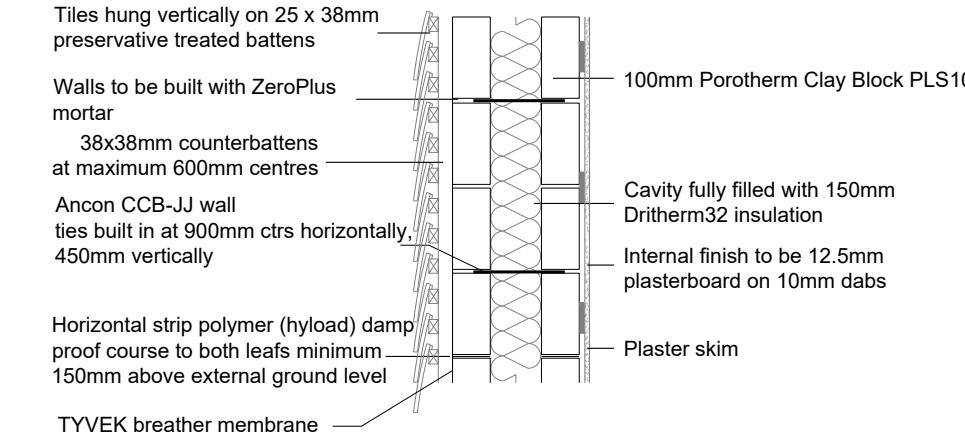
To achieve U Value of 0.18W/m<sup>2</sup>K

All work as per manufacturer's details. 20mm two coat sand/cement render to comply to BS EN 13914 with waterproof additive on 100mm Porotherm Clay Block PLS100. Fully fill the cavity with 150mm Dritherm32 cavity insulation as manufacturer's spec. Inner leaf to be 100mm Porotherm Clay Block PLS100. Internal finish to be 12.5 mm plasterboard on dabs. Walls to be built with ZeroPlus mortar.



## EW-02 - TILE HUNG FULL FILL CAVITY WALL

All work as per manufacturer's details

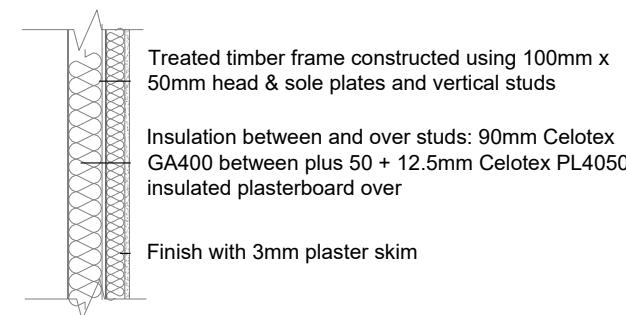


## IW-03 - STUD ASHLAR/DWARF WALL

To achieve minimum U Value of 0.18W/m<sup>2</sup>K

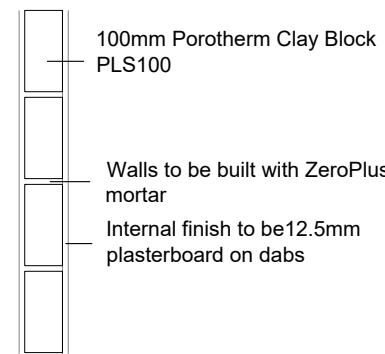
Construct stud wall using 100mm x 50mm head & sole plates and vertical studs (with noggin) at 400mm centres or to structural engineer's details & calculations. Insulation between and over studs, 90mm Celotex GA400 between plus 50 + 12.5mm Celotex PL4050 insulated plasterboard with VCL fixed to internal face of insulation.

Finish with 3mm skim coat of finishing plaster. All junctions to have water tight construction, seal all perimeter joints with tape internally and with silicon sealant externally.



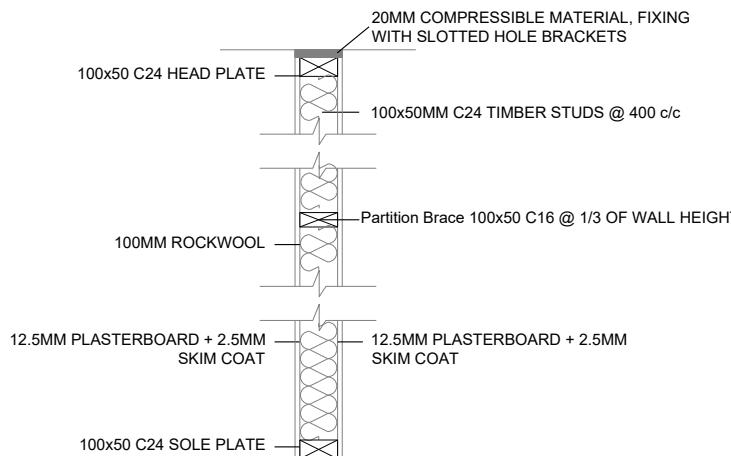
## IW-01 - INTERNAL LOAD BEARING WALL

Construct load bearing internal masonry partitions using 100mm Porotherm Clay Block PLS100 built off ground beams. All work as per manufacturer's details.



## IW-02 - INTERNAL STUD PARTITIONS

100mm x 50mm softwood treated timbers studs at 400mm ctrs with 50 x 100mm head and sole plates and solid intermediate horizontal noggin at 1/3 height or 450mm. Provide min 10kg/m<sup>3</sup> density acoustic soundproof quilt tightly packed (eg. 100mm Rockwool or Isowool mineral fibre sound insulation) in all voids the full depth of the stud. Partitions built off doubled up joists where partitions run parallel or provide noggin where at right angles, or built off DPC on thickened concrete slab if solid ground floor. Walls faced throughout with 12.5mm plaster board with skim plaster finish. Taped and jointed complete with beads and stops. At side where are wet areas (bathroom, utility, kitchen) use green plasterboard.



## FR-01 - WARM FLAT ROOF

(imposed load max 0.75 kN/m<sup>2</sup> - dead load max 0.80 kN/m<sup>2</sup>)

To achieve U value 0.11 W/m<sup>2</sup>K

EPDM Rubber roofing membrane laid in accordance with the manufacturer's specification.

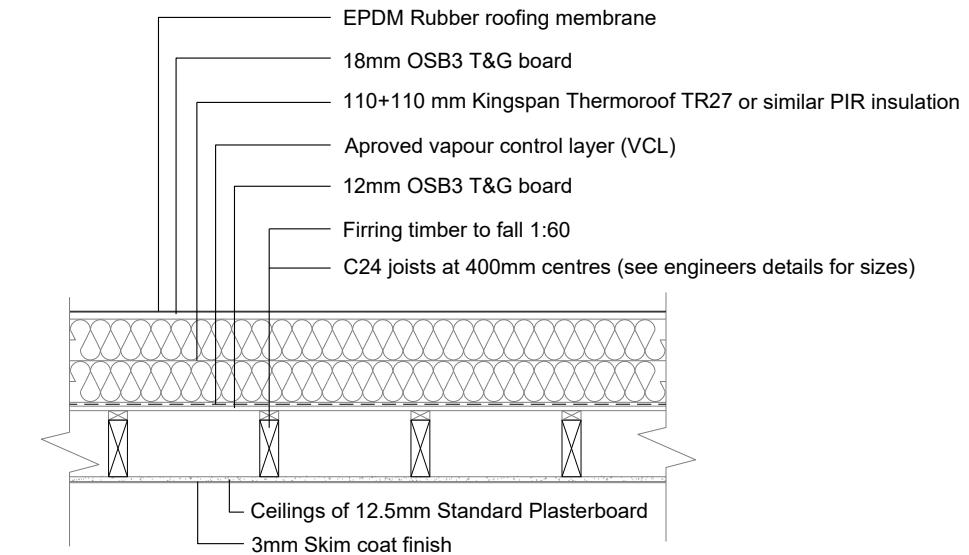
EPDM Rubber roofing membrane to be fixed to 18mm OSB3 T&G decking to BS1455 or approved OSB3 to BS EN 300:2006 over 110+110 mm Kingspan Thermoroof TR27 flat roof PIR insulation.

Insulation bonded to vapour control layer (VCL) to 12mm OSB3 to BS EN300:2006 decking laid to 1:60 gradient using firrings strips, fixed onto:

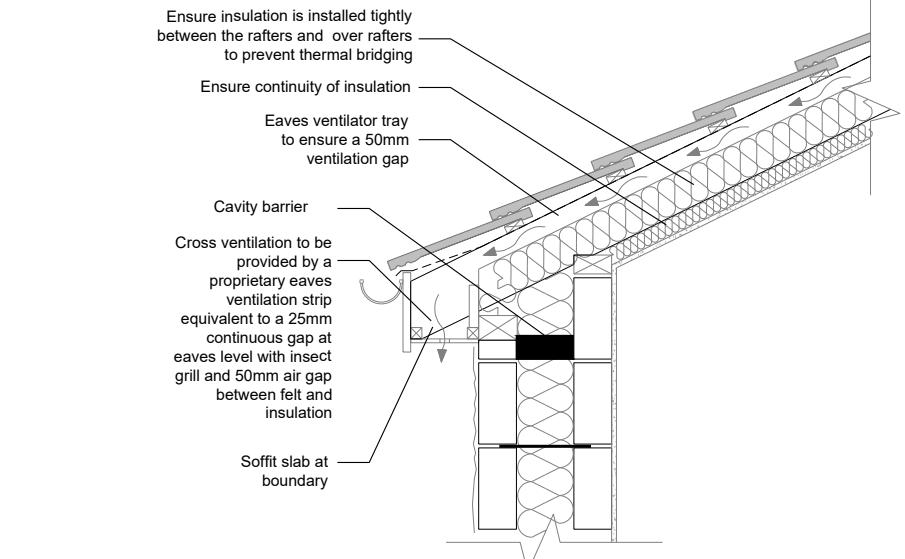
Softwood treated timber flat roof joists as specified by engineers strength class C24 at 400 centres.

Joist nailed over 100x50mm wall plate that is mortar bedded to wall and laterally restrained with 1000x30x5mm galvanised mild steel straps at maximum 2000mm centres. Provide noggin and packing at restraint strap positions. Fix 12.5mm vapour checked plaster board and 3mm skim to underside of joist.

Lead flashing Code 4 tucked 25mm into the wall with a 150mm upstand, linked to cavity tray where new roof abuts existing house.



## ED-01 - EAVES DETAIL OF PITCHED ROOF



## PR-01 - PITCHED ROOF

(imposed load max 0.75 kN/m<sup>2</sup> - dead load max 1.20 kN/m<sup>2</sup>)

Vented roof – pitch (TILES TO ALLOW PITCH WITH SARKING FELT UNDERLAY OTHERWISE USE COUNTER BATTENS ON EPDM ON OSB3 ON RAFTERS)

To achieve U-value 0.11 W/m<sup>2</sup>K

Roofing tiles to be fixed and lapped strictly in accordance with the manufacturer's instructions on 25x38mm tanalised dw treated battens on breather roofing membrane with BBA or other approved accreditation. Supported on 47x170mm C24 softwood treated timber rafters at 400 centres. Rafters nailed over 100x50mm wall plate that is mortar bedded and strapped to inner leaf with 1000x30x5mm galvanised mild steel straps at maximum 2000mm centres. 120mm Kingspan Kooltherm K107 insulation laid between rafters and 70+12.5mm Kingspan Kooltherm K118 insulated plasterboard fixed across face of rafters over vapour control layer (VCL). Finish ceiling with 3mm skim plaster. Allow continuous 50mm minimum ventilated air gap above the insulation to underside of the roofing felt. Provide 25mm continuous proprietary ventilation with insect mesh at eaves level and 5mm continuous ventilation at ridge level to allow for cross ventilation. Provide lateral restraint by installing galvanised mild steel straps 1000x30x5mm every 2m along the wall. Straps to be carried over at least 3 rafters with solid noggin and to be built into walls. Ensure that cranked end is tight in contact with cavity face of wall inner leaf and is not pointing upwards.

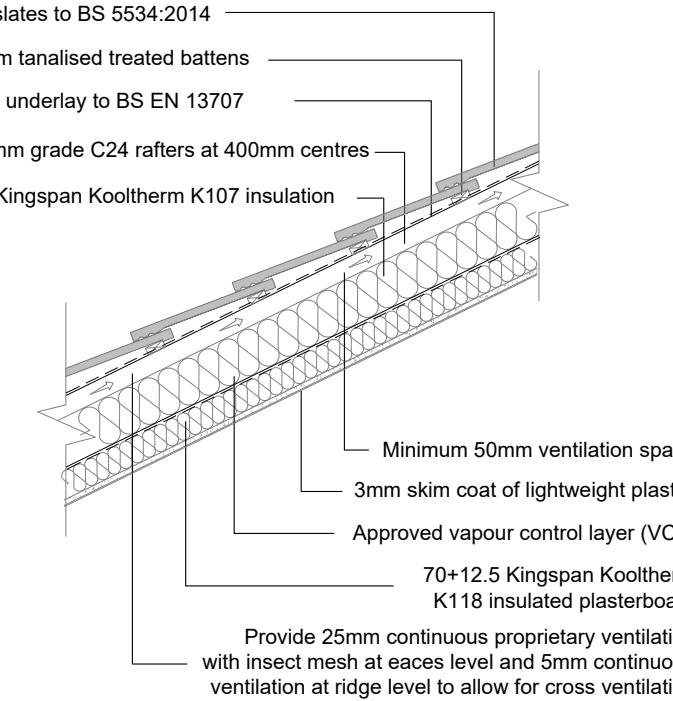
Natural slates to BS 5534:2014

25x38mm tanalised treated battens

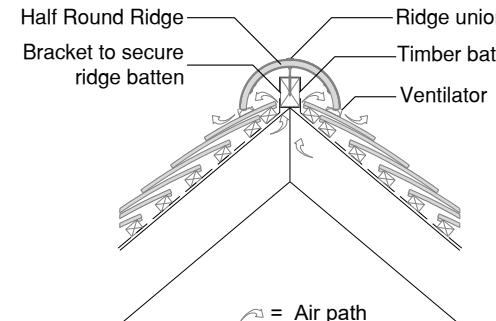
Breather underlay to BS EN 13707

47x170mm grade C24 rafters at 400mm centres

120mm Kingspan Kooltherm K107 insulation



## RD-01 VENTILATED RIDGE DETAIL



## PR-02 - PITCHED ROOF INSULATION AT CEILING LEVEL

Pitch 22-45° (imposed load max 0.75 kN/m<sup>2</sup> - dead load max 0.75 kN/m<sup>2</sup>)

(TILES TO ALLOW PITCH WITH SARKING FELT UNDERLAY OTHERWISE USE COUNTER BATTENS ON EPDM ON OSB3 ON RAFTERS)

To achieve U value of 0.10 W/m<sup>2</sup>K

Roofing tiles to match existing on 25 x 38mm tanalised sw treated battens on sarking felt supported on 47 x 170mm grade C24 rafters at max 400mm centres max span as in Structural Engineer's details and calculations. Rafters supported on 100 x 50mm sw wall plates. Insulation at ceiling level to be 100mm Kingspan Kooltherm K107 insulation laid between ceiling joists with a further 100mm layer over joists (cross direction).

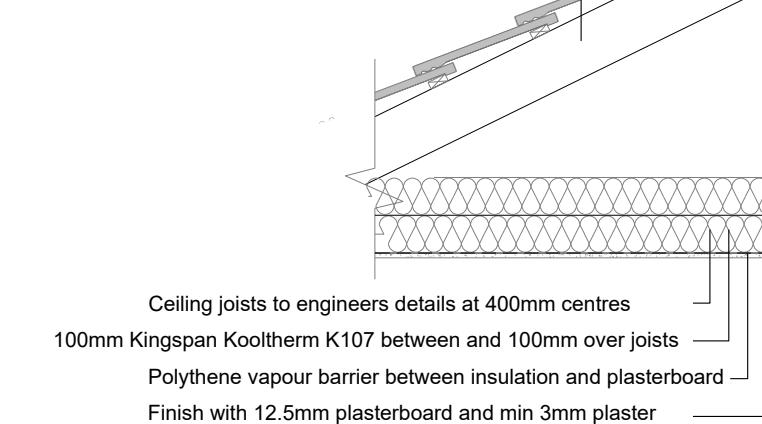
Construct ceiling using sw joists at 400mm centres, finished internally with 12.5mm plasterboard and min 3mm thistle multi-finish plaster. Provide polythene vapour barrier between insulation and plasterboard. Provide opening at eaves level at least equal to continuous strip 25mm wide in two opposite sides to promote cross-ventilation. Mono pitched roofs to have ridge/high level ventilation equivalent to a 5mm gap via proprietary tile vents spaced in accordance with manufacturer's details.

A continuous 5mm wide opening or the equivalent area is required to the length of the ridge

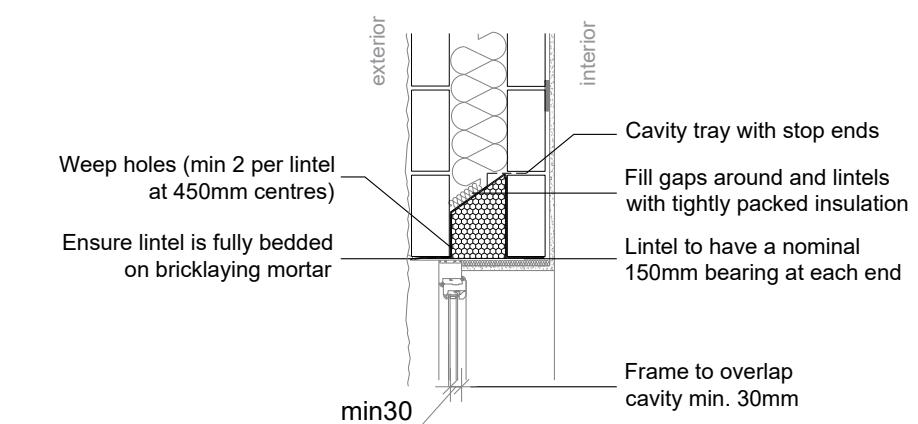
Roofing tiles

Sarking felt to BS747

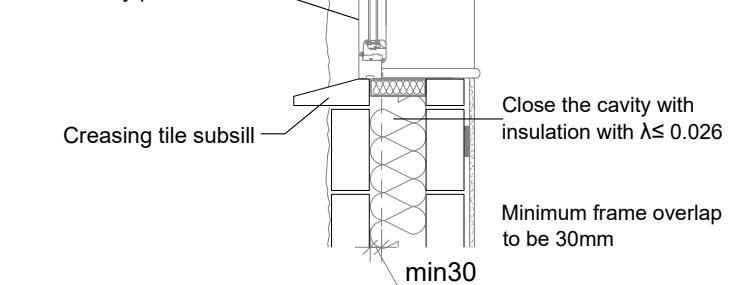
47 x 170mm grade C24 rafters at max 400mm centres



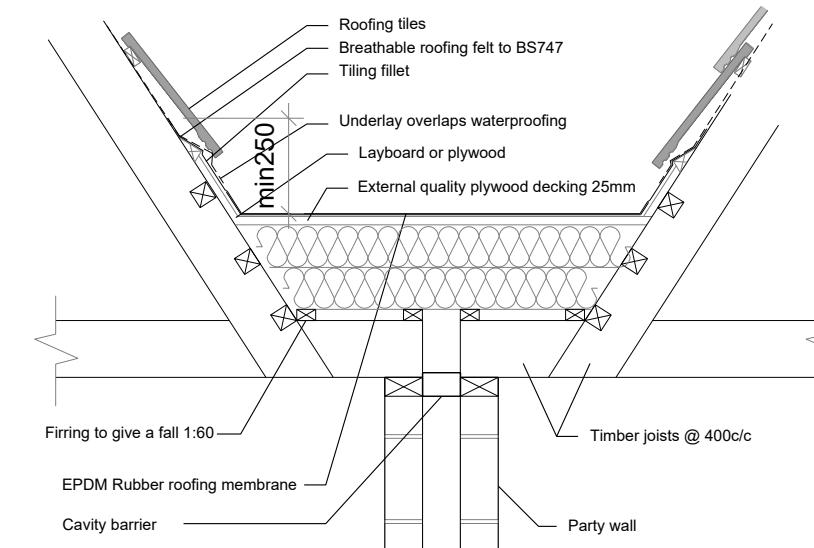
## EWD-07 - WINDOW HEAD DETAIL LINTEL



Exact location of window  
TBC by producer



## AB01 - FLAT ROOF AND PITCHED ROOF ABUTMENT



## ELD -01 - EXTERNAL LANDING

The external landing should be sufficiently large and level for ambulant disabled people and wheelchair users to be able to approach the door. It should be designed to avoid standing water and limit the amount of surface water reaching the threshold.

External landings on a ramped approach should be laid to fall between 1:40 and 1:60 in a single direction.

A drainage channel should be provided between the landing and threshold where surface water is likely to be blown towards the threshold. The channel should discharge to a drainage system or permeable field drain.

Threshold sills should have a slope between a maximum of 15° and a minimum of 7° to discourage water ingress and facilitate run-off. The upper leading edge of the door threshold unit should be no higher than 15mm. The width of an entrance should be at least 800mm.

