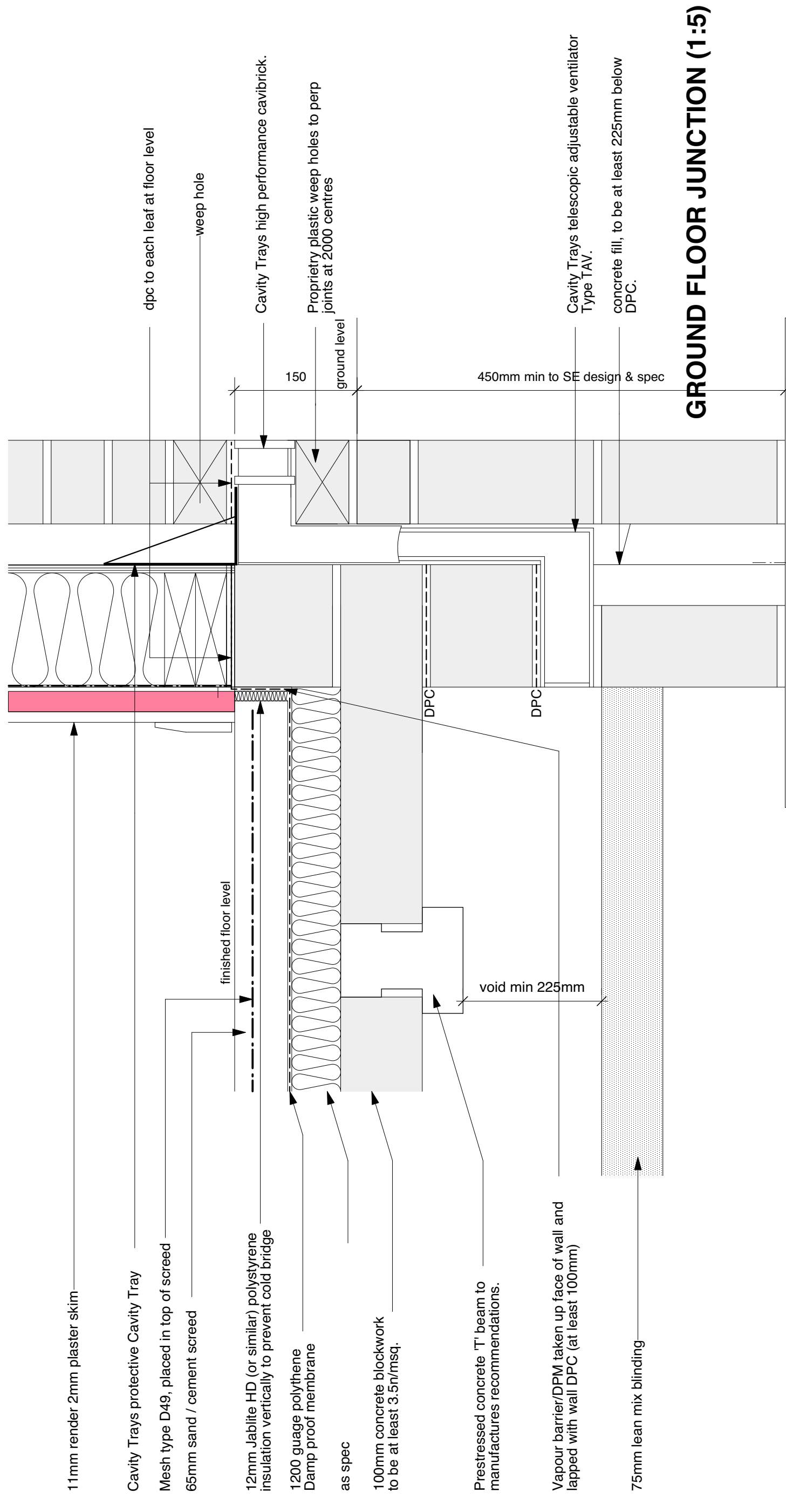
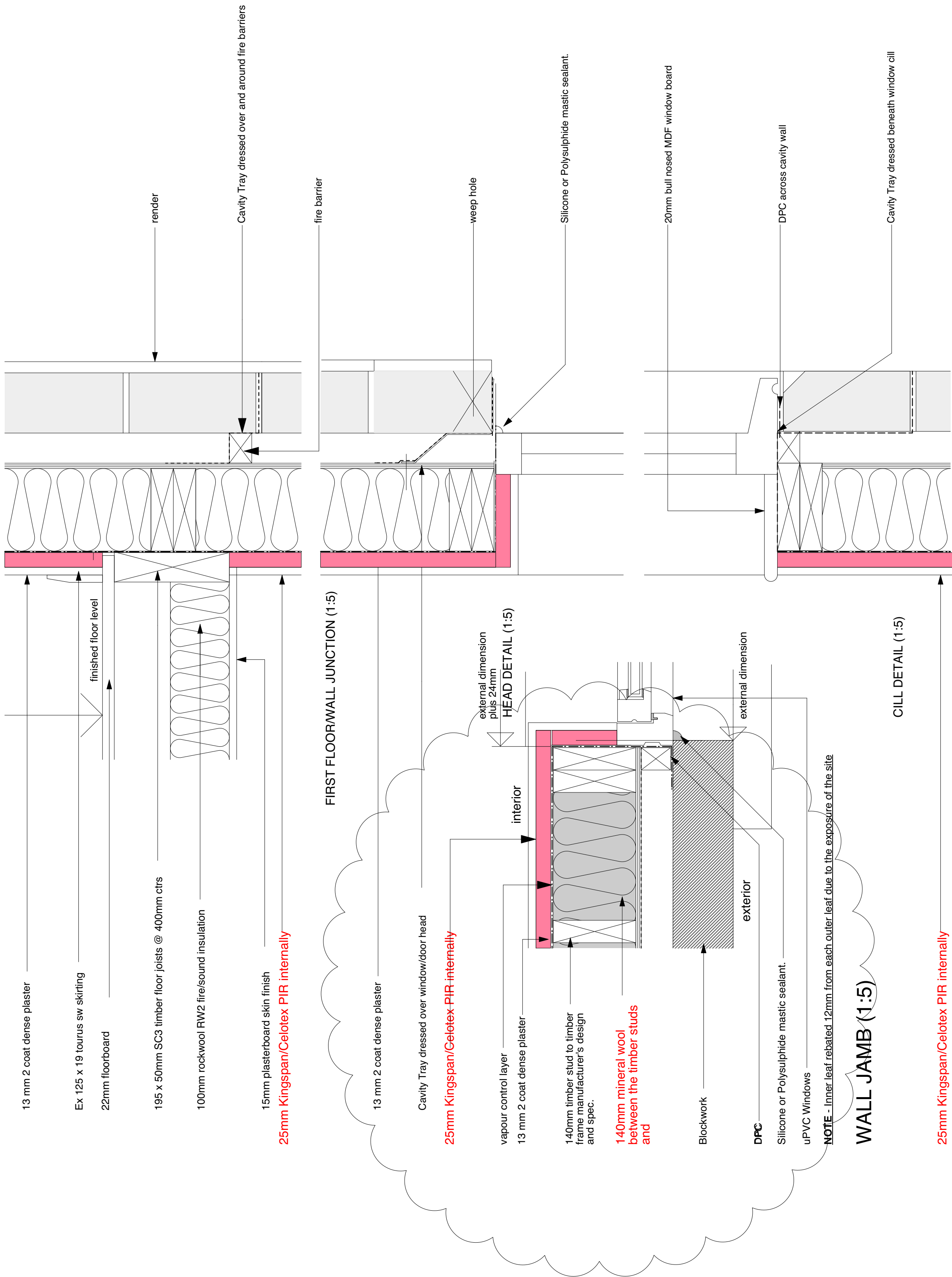




A. revised wall spec - 24.10.2023



George and Co.

Proposed new dwellings
and Granny annex at
Park Place, Troedryhiw

For Mr and Mrs Birch

604.015A	DETAILS		
BCA	1:50@A1	Dec 19	CG
1st Floor Woodfired Studios 62 High St Merthyr Tydfil CF37 8DE 07830328652 hello@georgeandco.studio www.georgeandco.studio			
DO NOT SCALE THIS DRAWING			©George and Co.

BUILDING REGULATION NOTES (to read in conjunction with the contract specification)

FOUNDATIONS

To be as Engineers design and calculations and to the Building Inspectors approval.

GROUND FLOOR TO MAIN HOUSE

To comprise:-
- 65mm 3:1 sand cement screed with Mesh type D49, placed in top of screed.
- 1200 guage polythene Damp proof membrane
- 150mm Cellotex Tuff R floor insulation
- Prestressed concrete 'T' beam with 3.5n/msq concrete blockwork 100mm thick to Manufactures design and spec. With 75mm concrete blinding on 100mm well consolidated hardcore below.

Cavity Tray telescopic adjustable ventilator 'Type TAV' with high performance Cavibrick fitted. To achieve the equivalent of 1500Sqmm for each metre run of wall. Positioning of all ventilators to be off-set rather than opposite another.

12mm Celotex RR insulation vertically to the perimetre of the external walls to prevent cold bridging (as detailed on drawings).

Damp Proof Membrane taken up walls and lapped with wall DPC to form continuous waterproof barrier.

To have a 'U' value of 0.11w/K or better, to comply with the Approved document L1A

EXTERNAL WALLS

300mm cavity walls comprising:-
- 19mm render to external
- 3 courses of engineering brickwork below dpc, to be blue/black only.
- 100mm blockwork and render outer leaf.
- 50mm cavity.
- 9mm plywood sheathing bonded to timber studs.
- 140 x 38mm timber frame stud inner leaf to timber frame manufacturer's design and spec.
- insulation inbetween studs to inner leaf, to timber frame manufacturer's design and spec.
- 140mm mineral wool between the timber studs and 25mm Kingspan/Celotex PIR internally
- internal load barring partitions as timber frame manufacturer's design and spec.

- 150 x 215mm blockwork below DPC inner leaf to cavity walls.
- 100 x 215mm blockwork below DPC to internal load barring partition.
- 215mm block flat below DPC to dwarf walls internal load barring partition.

- **NOTE:** Timber frame manufacturers structural details to be submitted to the Building Control department before erection.

CAVITIES

Stainless steel cavity wall ties to BS1243 at 600mm horizontal and 450mm vertical staggered centres generally and 225mm vertically at openings and corners, to timber frame manufacturer's design and spec. Wall ties should be capable of accommodating any anticipated differential movement, fixed to stud not sheating.
Cavity below ground level filled with lean mix concrete to within 225mm of finished floor level.
Form weep holes at 900mm centres to perpendicular joints at ground level.
Incorporate DPC horizontally to each leaf at floor level and vertically at openings.
Lap 1200 gauge polythene DPM with wall DPC's to form a continuous moisture barrier.
Straight runs of block work in excess of 6m to have movement joints in accordance with BS 6093.
Form thresholds to external door openings using bricks as detailed on drawings.

WINDOW CILLS

cills to be pressed aluminum cills to match windows with DPC under cill (as detailed on drawings).

FIRST FLOOR

To consist of 22mm fin thickness 'chipboard' floor boards generally on joists that SE spec and design.
Joist ends built into new cavity wall to have a end bearing of 100mm.
Double joists and trimming joists formed using joists bolted together at 900 centres with 12mm galv ms bolts and washers.
Double joists to be provided below partitions and bath. Trimming joists to be provided to stair opening and landing edge. Cross noggins the same size as joists to be provided where partitions run at right angles to joists.
Provide herringbone strutting at mid span or two at third span positions where shown on drawings using 175 x 50 sw blocks.
Strap joists to walls at 2000mm centres with 30 x 5mm galvanised ms straps at right angles to span screwed over at least 3 joists and with hooked ends built into inner leaf of cavity wall.

LOAD BEARING STUD PARTITIONS

Load bearing partitions to be built of foundations as shown on drawings.
Non load bearing partitions to be built off floor slab.
Incorporate DPC at floor level to load bearing partitions and lap with DPM.

Stud partition to kitchen/dining room, WC to incorporate 100mm mineral Rockwool RW2 fire/sound insulation infill between studs.

NON-LOAD BEARING STUD PARTITIONS

Stud partitions to comprise 75 x 50mm sw studs at 400mm horizontal centres with cross noggins at 600mm vertical centres finished both sides with 1 layer 9.5mm plasterboard and 3mm skim.
Stud partitions to bathroom & en-suite walls to incorporate 100mm mineral wool infill between studs, waterproof plasterboard dry lining behind tiling.

SOUND

All internal walls and internal first floors to be fully insulated with 100mm ROCKWOOL RW2 insulation inbetween joists and studs.

CEILINGS AND INTERNAL WALLS

1 layer of 12.5mm plasterboard with 3mm skim smooth finish.

FIRE

All habitable rooms above the ground floor should have an obstructed openable area that is at least 0.33SqM, be a minimum of 450mm high and 450mm wide. The bottom of the openable area should not be more than 1100mm above the floor.

All habitable room doors to the dwellings opening onto the stairwell to be half hour fire resistant, with positive self closers.

LINTELS

Cavity wall lintels to be Catnic or similar insulated steel tray lintels, with integral dpc's of depth appropriate to span, and loadings in accordance with the manufacturer's recommendations. 150mm minimum end bearing. Form weep holes at 900mm centres to perpendicular joints over lintels.

All lintels to internal partition walls to be precast or prestressed concrete appropriate to span and loadings in accordance with the manufacturers recommendations. 150mm minimum end bearing.

Openings greater than 1200mm increase lintel end bearing to 225mm
All to manufacturers design and specification.

WINDOWS AND DOORS

Windows to be VELFAC 200 series windows, with double or triple glazed sealed units, with opening lights as indicated on elevation drawings. Windows frames to be SET AS DETAILED.
Glass to all windows to be low emission 'K' glass or similar approved and to have a whole unit 'U' value of 1.4Wm2K or better and to have a low g factor 0.5 to comply with the Approved document L1A.
All windows to have trickle ventilators in window frame head.
Toughened glass to be fixed to all external doors AND WINDOWS.
Installation to be in strict accordance with manufacturers specification.
Weatherseal window head, jambs and cill to be Compriband 600.

Doors and windows, to meet the security requirements of British Standards publication PAS 24:2012

FRONT DOOR TO BE A MINIMUM 775mm WIDE

EXTERNAL SLIDING DOORS

Sliding Doors to be as clients requirements, Smart Systems Visoglide Plus profile, with double glazed sealed units, to have a whole unit 'U' value of 1.5Wm2K or better and to have a low g factor 0.5, toughened double glazed units as indicated. All accessories for the correct installation in accordance with the manufacturers specification. <http://www.smartsystems.co.uk>

Front door to be softwood timber as elevations, set in hardwood frame. To include Exitex MDS/140 Mobility Inward Door Sill 1m - Aluminium - 19121 low level threshold on DPC.

RAMP TO FRONT ENTRANCE

1 in 12 ramp up to a 900 x 900mm landing. 150mm Concrete Brushed finished, on 100mm compacted Hardcore. Front door to have brick laid as soldier course with low rise 'bump over' threshold by door manufacturer. With a vertical DPC at wall/ramp junction, see detail showing upvc gutter set within concrete ramp.

PAVING SLABS

To be 600x600x50mm pc. paving slabs laid to falls to gullies on 75mm sand bed, 10mm joints between slabs in 1:6 mortar.

STAIRCASE

Timber from ground to first floor, to have maximum rise 200mm, maximum going 240mm, clear headroom 2000mm vertically, 900mm wide overall strings set into depth of stud walls, handrail minimum 900mm above flight and a minimum 900mm to landing. Balusters to be formed using solid studwork and skim plaster finish with ss stopbeads at all edges.

JOINERY

Skirting, window head batten, internal window cills and architraves to openings to be softwood, all to be painted.
Skirting to be 19x250mm flat edge.
Architraves to be 19x100mm flat edge section.
Curtain Rail to be 25x100mm section, to be agreed.
Window cills to be 225x20mm section with square edge.

ROOF STRUCTURE

Trussed rafters all as SE design and spec.
100 x 50mm wall plate strap fixed to walls using 30 x 5 x 900mm galvanised ms straps at 2000mm centres
End 3 trusses rafters and ceiling ties abutting gable walls stap fixed to masonry using 30 x 5 x 1500mm galvanised ms straps at 2000mm centres. Provide noggins between trusses at strap positions to support straps.

NOGGIN AND STRAPS

Provide noggins at ceiling level in roof void to fix plasterboard, light fittings and hatch access.
- Noggins in roof comprise of: Light Fittings 75x50mm.
- Trimming to roof lights 50x147mm

ROOF FINISH MAIN HOUSE

Artificial Slate **Marley 600mm x 300mm Thrutone Man-Made Fibre Cement Slate - Graphite**, all to be laid in accordance with the manufacturers recommendations on 50 x 25mm treated sw battens on sarking felt to BS 747 type F.
Roofing felt to be continuous over ridge, hips and valleys, dressed down into gutter and fixed to top side of softwood roof trusses.
Incorporate 'Cavity tray' over fascia ventilator - OFV25 to give 25mm continuous slot ventilation.

CONSERVATION OF FUEL AND POWER.

Roof Insulation
Cold roof construction, Horizontal roof voids to be insulated with 250mm Rockwool insulation quilt laid in 2 layers, 100mm thick between rafters and 150mm over rafters. 12.5mm plasterboard and 3mm skim nailed into rafters. All to give minimum U value of 0.16 W/sq.mK
Internal sloping soffit roof to be insulated 2No. 75mm Celotex tuff-R insulation boards set between rafters and 12.5mm plasterboard with 3mm skim finish as detailed. All to give a 'U'-value of 0.20w/m2/degC or better. 50mm minimum air space to be maintained above insulation.
50mm minimum air space to be maintained above insulation using treated sw spacer battens fixed to sides of rafters.

Glass to all windows to be low emission 'K' glass and to have a 'U' value of 0.20Wm2K or better, to comply with the Building Regs 2000, Document L1.
Windows to Area of double glazing not to exceed 25% of the perimeter wall area.

Hot water storage vessels and hot water pipe runs in the roof void to be insulated.

Walls to be insulated as described elsewhere and to have a 'U' value of 0.35 Wm2K or better.
VENTILATION
Natural ventilation opening lights to Habitable rooms, kitchens and toilets to be provided of at least 1/20th of the floor area of the room.
Mechanical ventilation equivalent to 68 litres per second is to be provided to bathroom, 15l/s to WC and 60 litres per second to kitchens..
Vent ducts to incorporate condensation traps and outfall pipework.
To avoid the build up of condensation in the warm roof structure breathable Intello Plus VCL allows venting to inside when conditions require. Trickle vents to be provided to all windows to achieve 8000mmSq background ventilation in habitable rooms.

SPRINKLER SYSTEM

Sprinkler system to be designed and installed by a competent person to comply with Approved Document B in Wales

CONSERVATION OF FUEL AND POWER.

U values as listed above comply with Approved Document L1A in Wales

AIR PRESSURE TESTING.

Air Pressure tightness of 5 and is to be carried out in accordance with The Building Regualtions 2013, Approved Document L1a, Section 2 : Quality of construction and commissioning.

ABOVE GROUND PLUMBING AND DRAINAGE - Employers requirements:

Single stack AAV system to be provided and fitted in accordance with the manufacturers recommendations comprising 100mm upvc pipe vented in accordance with part H1 of the Building Regulations, 32mm wastes to basins, 40mm wastes to sinks and 100mm outlets to wc pans. 50mm traps to wc pans, 75mm deep seal traps to all other fittings.
Resealing traps to be provided to 32mm wastes exceeding 1500mm in length and 40mm wastes exceeding 3000mm in length. Where visible, white internally, black externally

RAINWATER DISPOSAL- Employers requirements:

Rainwater system and gutters to be min 115mm half round dia as detailed, installed in accordance with the manufacturers recommendations.

BELOW GROUND DRAINAGE - Employers requirements:

Underground drainage to be to BSMA (or similar approved) Upvc drainage system and fittings laid in accordance with the manufacturers recommendations, to BS 4660:1973.

Foul Drains laid to 1 in 40 max falls. Surface water drains laid to 1 in 80 minimum falls.

Inspection chambers and covers to be Osma 450mm dia. universal inspection chambers including base, shaft and 4D.491 cover and frame or similar approved. All bedded and backfilled to Osma's recommendations.

Manhole with dropshaft to accomodate change in level from site to mains sewer to be provided

Rodding Eyes to be Osma sealed rodding eye and cover ref: 4D 356 or similar approved.

PIPEWORK UNDER THE BUILDING

All pipework under the building to be encased with a minimum of 150mm thick concrete of ST4 strength placed in one operation, to incorporate 18mm thick compressible expansion board at regular intervals as dictated by pipe joints.

WALL PENETRATIONS- Employers requirements:

All drains which pass through walls to have a 600mm long rocker pipe and RC lintols over. Fill gap between around wall penetrations with expanding form.

EXTERNAL GULLIES- Employers requirements:

Provide and lay PVC-U Osma (or similar approved) plain hopper gully (4D.700) connected to universal pipework, laid on a 75mm thick 1:2.4 square concrete bed. Black

Backfill around gully with selected material, grating to be set in path 10mm below finished level to aid surface water discharge into prescribed underground drainage. To include trap insert.

SOIL & VENT- Employers requirements:

Stub stacks are to terminate above flood level of cisterns via 4S.304 air admittance valve.

HEAT PRODUCING APPLIANCES - Employers requirements:

Space and Hot Water Heating :
To be Worcester Bosch Greenstar condensing boiler to be 90% efficient, and minimum 5" dia flue ducted out to the elevation; with underfloor heating system on the ground floor and rads and the first floor - positions and sizes to be as M&E consultant.

Towel rail in bathroom to be plumbed into central heating but have electrical heating element for use in summer.
Heating zones: provide 3 different heating zones: Bed 1, Bed 2 and rest of house with thermostats in each zone.

The whole of the installation to meet the requirements of the current British Standard Code of Practice.

ELECTRICAL INSTALLATIONS- Employers requirements:

Power and Lighting
All light & power fittings to be supplied by MK or similar approved.
All power points to be double switch socket outlets.
All power outlets to be double pole.
The responsibility of design, adequacy and suitability of each system shall be the contractors. All to meet the requirements of Part P, to design, install, inspect and test all electrical work in accordance with BS 7671.

Internet

The houses will have an access point linked by ducting to a network termination point. As Diagrams 1(a)
The access point is on an outside wall and connected by a through-wall duct to the network termination point

Extract Fans.

Extract fans to be fitted as indicated on plan.

HYGIENE - Employers requirements:

The hot water system is to be vented.

HOT WATER LIMITED TO 48 DEGREES

MATERIALS AND WORKMANSHIP

All materials and workmanship are to comply with the relevant and current British Standards, Codes of Practice, current edition of the Building Regulations, and shall be to the approval of the Building Inspector.
Plumbing to comply with BS 5572.
Electrical work to comply with the current edition of the IEE Regulations.
Generally structural timbers to be SW or whitewood C24 grade to BS 4978. To be C16 where specified by the Engineer.

All softwood to be vacuum pressure impregnated.
Softwood for joinery to BS 1186 part 1, screws to BS 1210, nails to BS 1202.
Carpentry to comply to CP 112.
All brickwork below DPC level to be Class B engineering bricks.

GENERAL.

Do not scale off the drawings.
All heights, levels, sizes and dimensions to be checked on site before any work is put in hand.

Locate existing services/drainage runs prior to construction. Existing services through site to be protected during construction. There is an OH power line on site near entrance follow HSE guidelines for electrical safety at work.

The manufacturers recommendations are to be followed in respect of the installation and fixing of all products and any discrepancies between those recommendations and any other requirements of the specification and/or drawings are to be notified to the designers.

A. revised wall spec - 24.10.2023

**George and Co.**

Proposed new dwellings and Granny annex at Park Place, Troedryrhwi

For Mr and Mrs Birch

604.014A		SPEC	
BCA	1:50@A1	Dec 19	CG
1st Floor Woodfired Studios 62 High St Merthyr Tydfil CF37 8DE 07830328652 hello@georgeandco.studio www.georgeandco.studio			
DO NOT SCALE THIS DRAWING			©George and Co.



To comprise:-

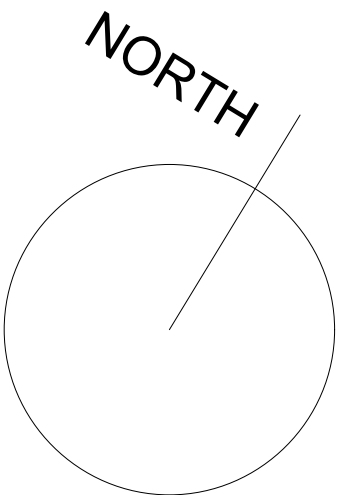
- 65mm screed
- Underfloor heating
- VCL
- 150mm Celotex FR5000 floor insulation - tape joints with insulating tape
- 1200 gauge polythene damp proof membrane
- beam and block floor.

Damp Proof Membrane taken up walls and lapped with wall DPC to form continuous waterproof barrier.

To have a 'U' value of 0.11w/K or better, to comply with the Approved document L1A



3 courses of engineering bricks are to be laid under the DPC

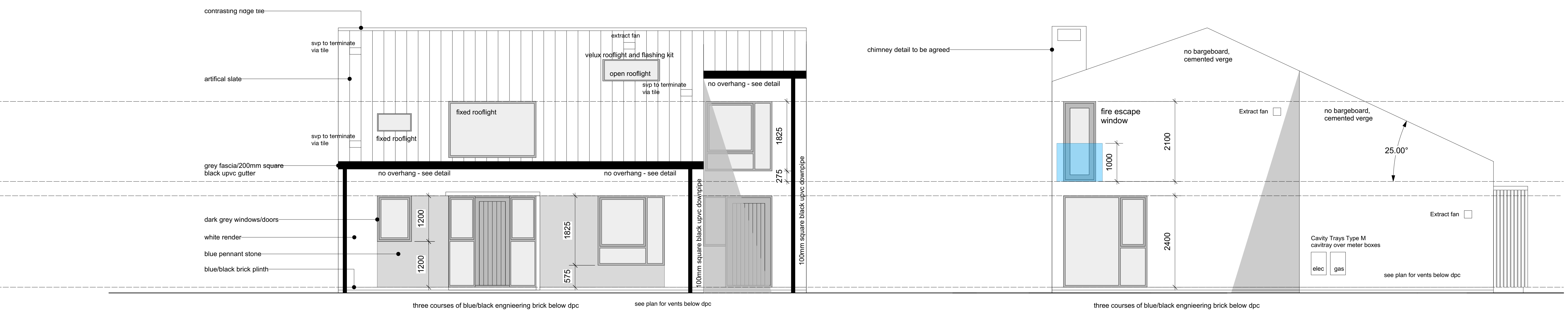


Concrete lintels over are not acceptable, to be Catnic or IG lintels, see specification

A. revised wall spec - 24.10.2023

The logo for George and Co. features a stylized 'G' inside a circle. Below the logo, the text 'George and Co.' is written in a serif font. Further down, the address 'Proposed new dwellings and Granny annex at Park Place, Troedyrhiw' is listed, followed by 'For Mr and Mrs Birch'.

604.010A		PLANS	
BCA	1:50@A1	Dec 19	CG
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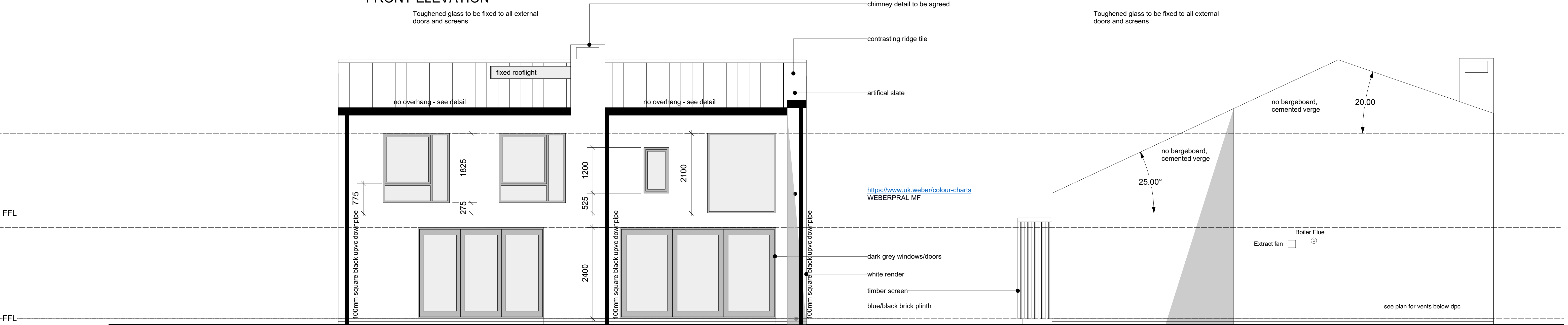


FRONT ELEVATION

Toughened glass to be fixed to all external doors and screens

SIDE ELEVATION

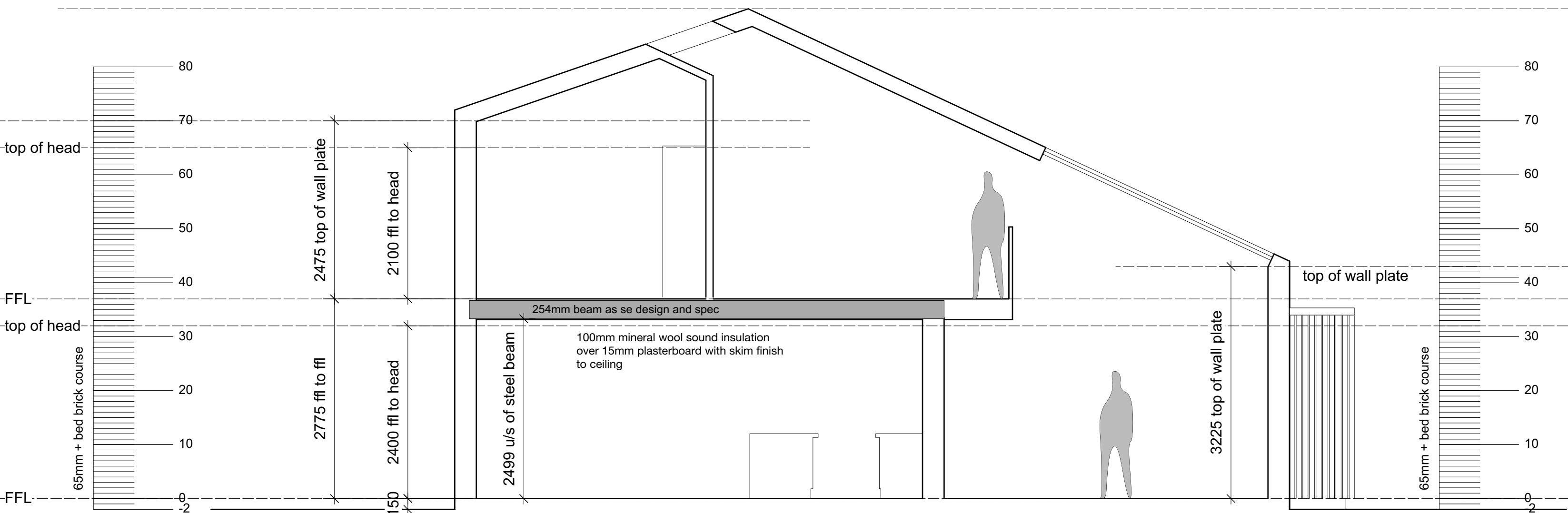
Toughened glass to be fixed to all external doors and screens



REAR ELEVATION

Toughened glass to be fixed to all external doors and screens

SIDE ELEVATION



SECTION A-A



weberpral MF

weberpral MF is a fine-textured, through-coloured monocouche render available in a range of 4 popular colours with a scraped finish.

B. Rooflight revisions Nov '20
A. Revised middle plot Oct '20

George and Co.

Proposed new dwellings and Granny annex at Park Place, Troedryhiw

For Mr and Mrs Birch

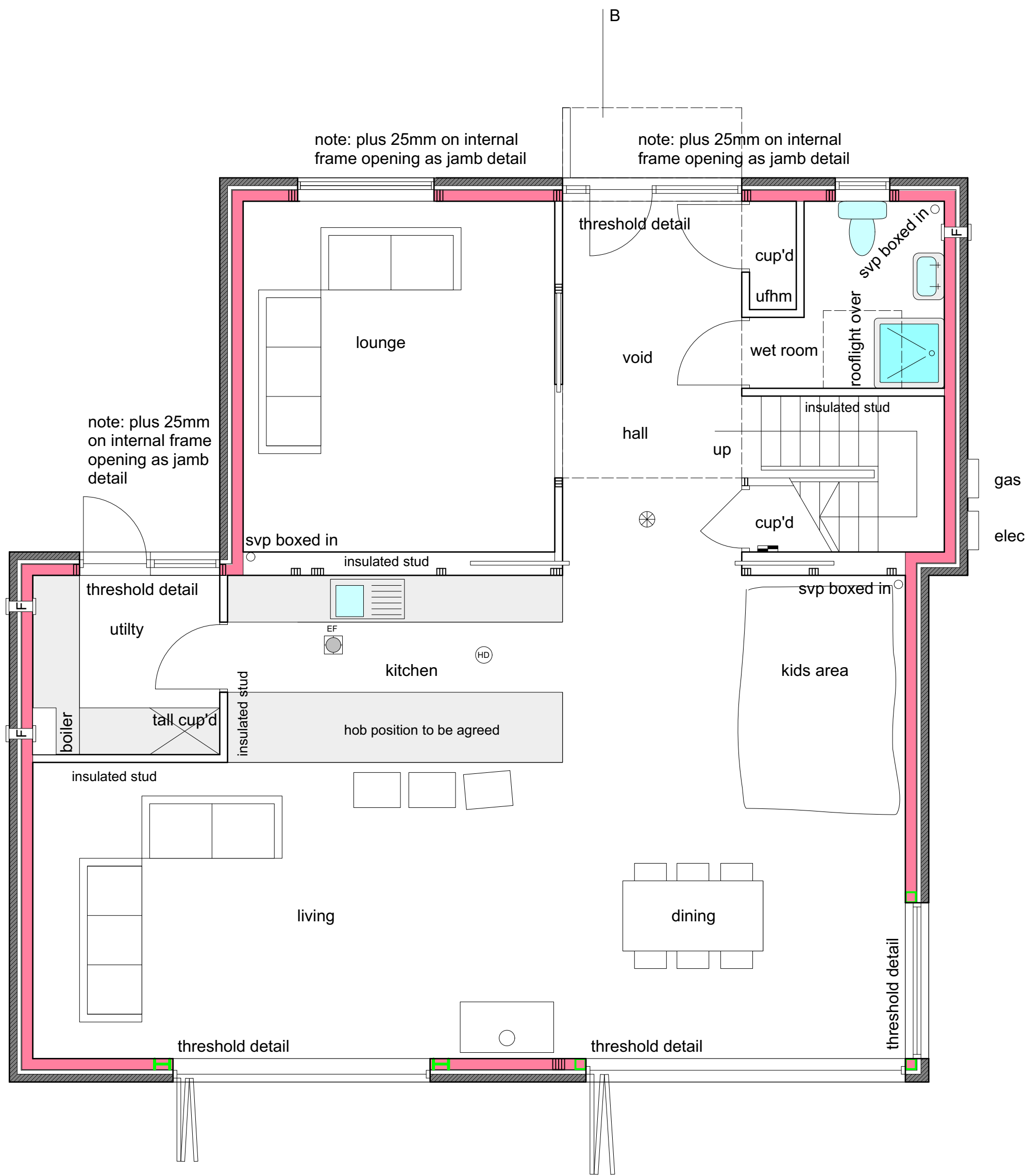
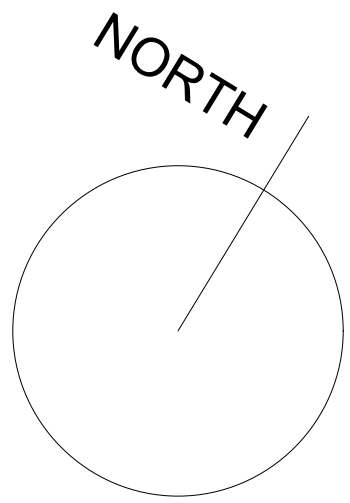
604.013

ELEVATIONS

BCA 1:50@A1 Dec 19 CG

1st Floor
Woodfired Studios 62 High St
Merthyr Tydfil CF37 6DE
07830328652
hello@georgeandco.studio
www.georgeandco.studio

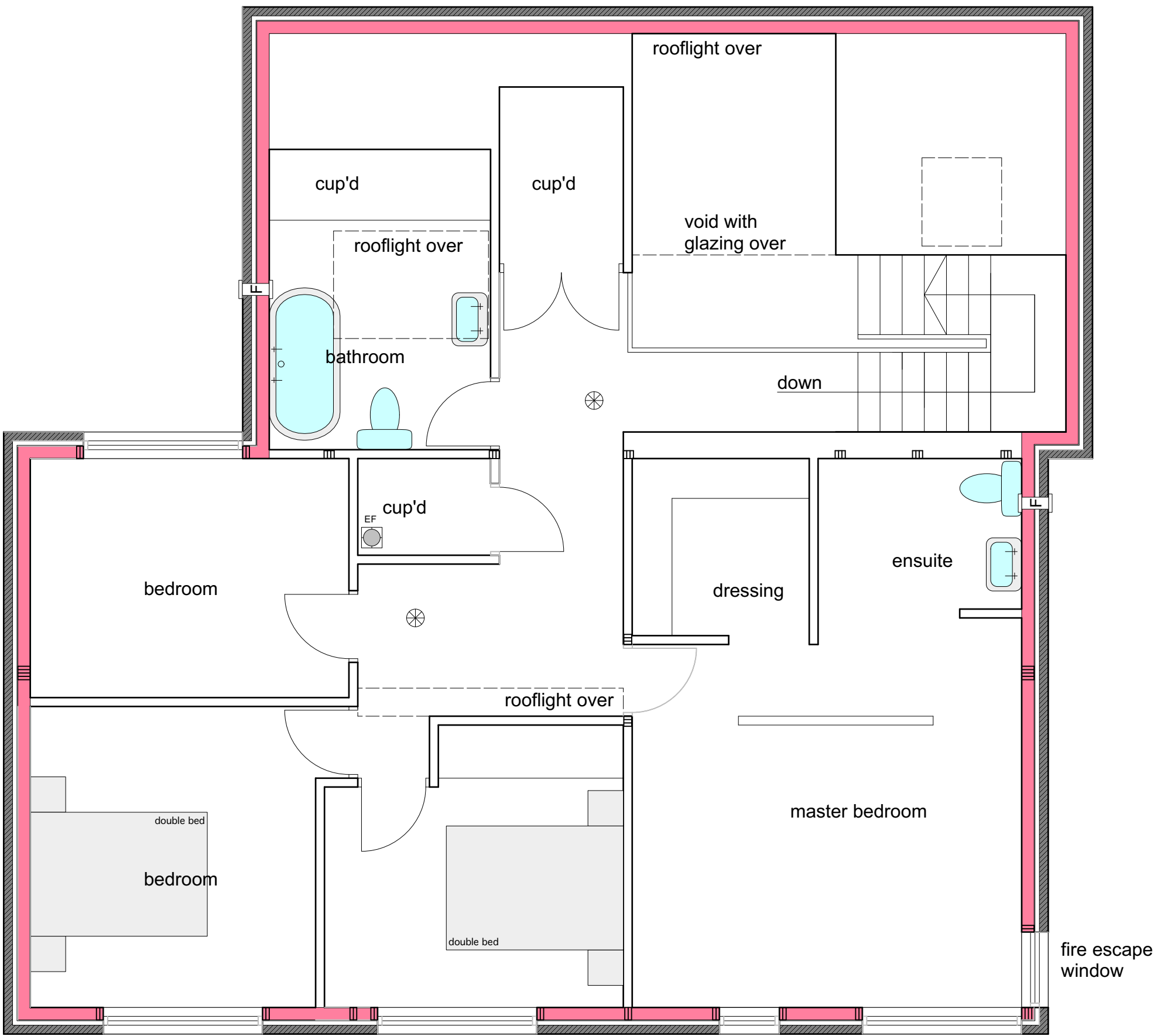
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GROUND FLOOR PLAN

to be read with recessed jamb detail
George and co will not except any claims against for damp or cold bridging unless built in accordance with details. Contractor to assume liability and costs if details are not conformed to.

Concrete lintels over are not acceptable, to be Catnic or IG lintels, see specification



FIRST FLOOR PLAN

to be read with recessed jamb detail
George and co will not except any claims against for damp or cold bridging unless built in accordance with details. Contractor to assume liability and costs if details are not conformed to.

Concrete lintels over are not acceptable, to be Catnic or IG lintels, see specification

KEY TO ELECTRICAL FITTINGS

- ⊕ MK 1196 WHI low energy pendant light fitting set.
- ⬤ ceiling mounted recessed light fitting.
- ⬤ external wall/ceiling mounted light fitting.
- ⬤ MK 1157 WHI ceiling mounted pendant set.
- ⬤ MK 1173 WHI ceiling mounted lamp holder.
- ⬤ MK 4870 WHI wall mounted single switch.
- ⬤ MK 4871 WHI wall mounted 2-way switch.
- ⬤ MK 3191 WHI ceiling mounted pull cord switch.
- ⬤ MK K2757 WHI wall mounted double socket.
- ⬤ single 13amp socket outlet at low level with indicator switch set above worktop.
- ⬤ Unswitched fused spur for future burglar alarm.
- ⬤ MK K370 WHI wall mounted fused spur.
- ⬤ MK K3520 WHI wall mounted tv socket with co-ax cable to signal booster housed in roof void.
- ⬤ MK K422 WHI wall single telephone socket wired back to BT entry point.
- ⬤ Electric, BEAB approved, to be Redring Digilamp DS 53-798501 complete with shower head, controller and holder.
- ⬤ MK K5060 wall mounted cooker control unit.
- ⬤ MK Sentry 8 way consumer unit complete with mini circuit breakers and enclosure.
- ⬤ Xpelair or similar extract fan to BS EN 60335-2-80 with integral humidistat, manual override controller and back draught shutter.
- ⬤ Extract rates to conform with Building Regulations. Bathroom/en-suite extract to achieve air changes of 15 litres per second, Kitchen extract to achieve 60 litres per second. To include for fused switched spur connection.
- ⬤ Ceiling mounted, as above.
- ⬤ Fixed Temperature Heat detector (Optical type) connected to mains with battery backup in event of mains failure. To BS 5446 part 1.
- ⬤ Smoke alarm to BS 5446:Part 1 (optical), mains powered with 72 hour battery back up.

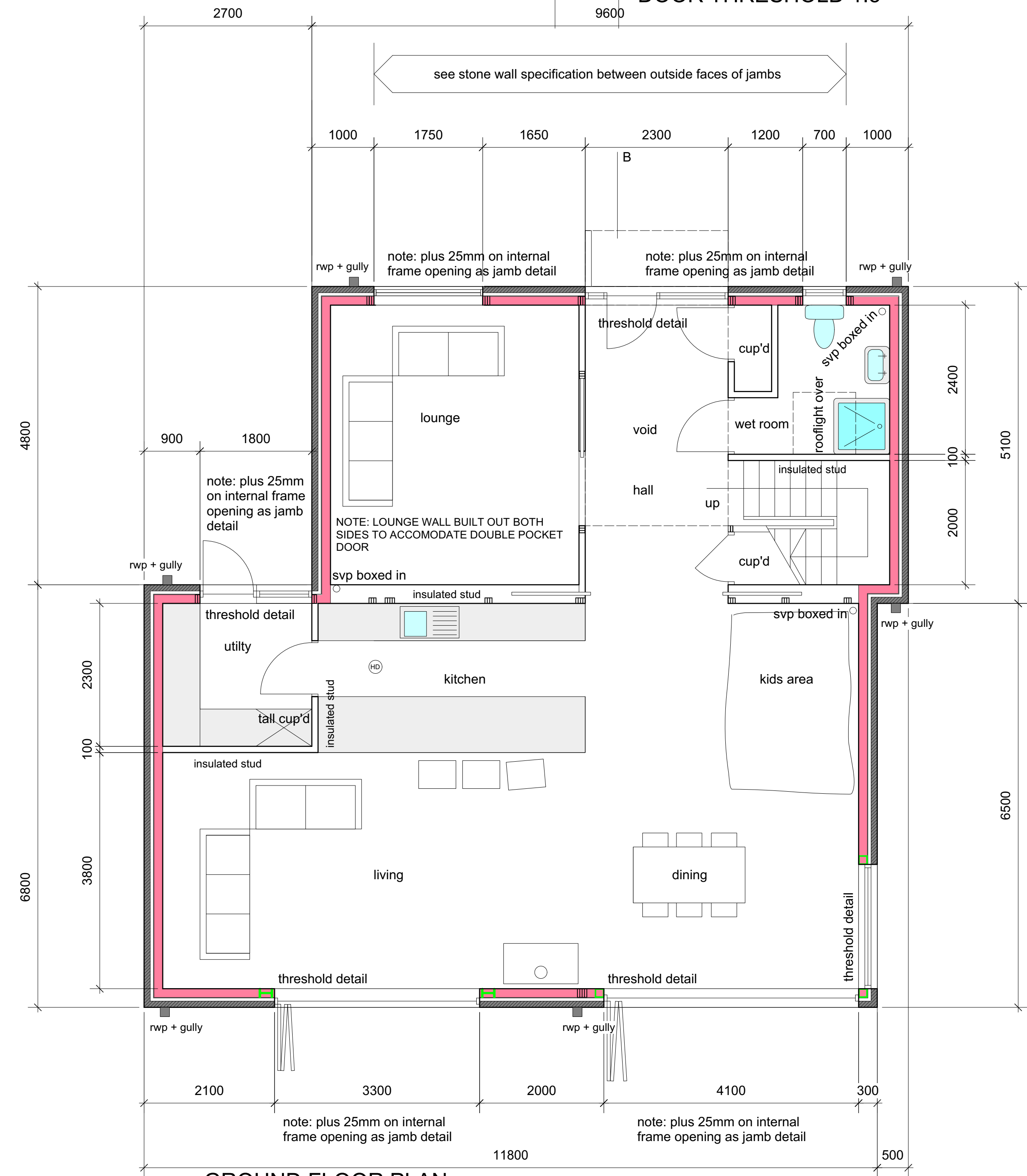
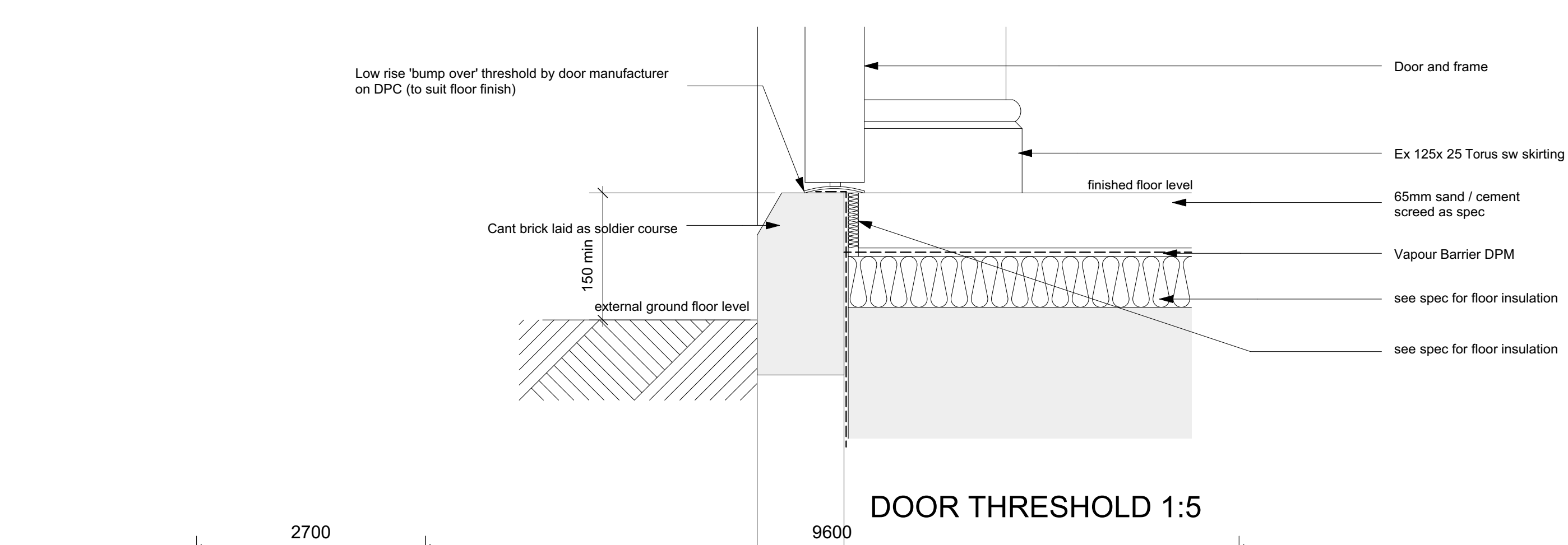
ELECTRICAL INSTALLATION
Whole of electrical installation to be in accordance with current IEE regulations and B.S.7671.
All components to be fixed strictly in accordance with manufacturer's recommendations and including all ancillary items e.g. back boxes, junction boxes, sub mains, etc.

2100
1800
1200
1050
450
4800

top of extract fan
top of shower light consumer unit, high level fused spurs and external lights
top of light switch
u/s socket outlets, cooker control unit and fused spurs over work tops
u/s socket outlets over skirtings

Heights of fittings above ffl.
(unless otherwise shown on drawings)



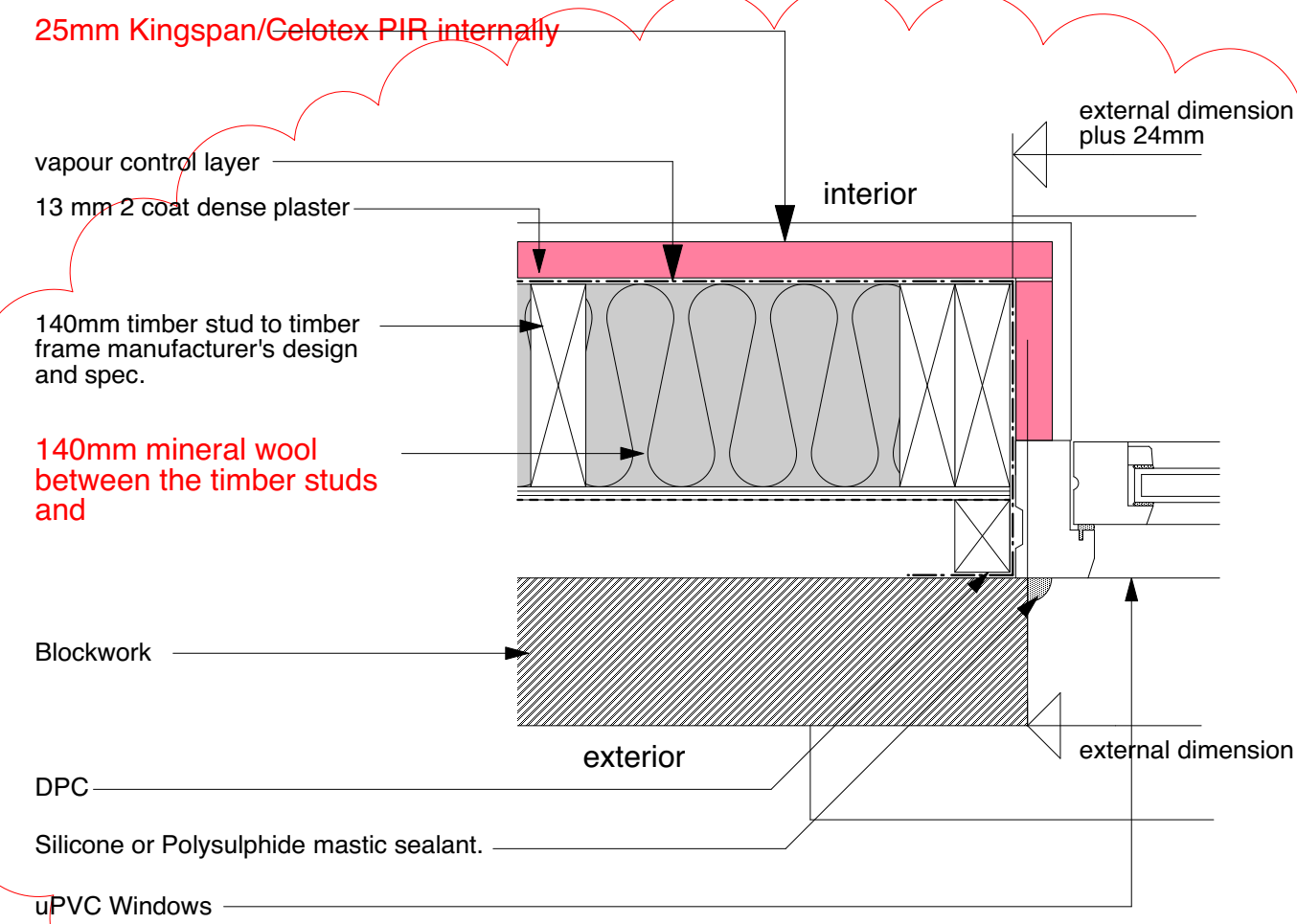
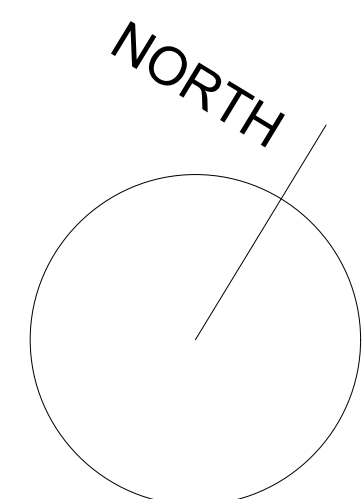


GROUND FLOOR PLAN

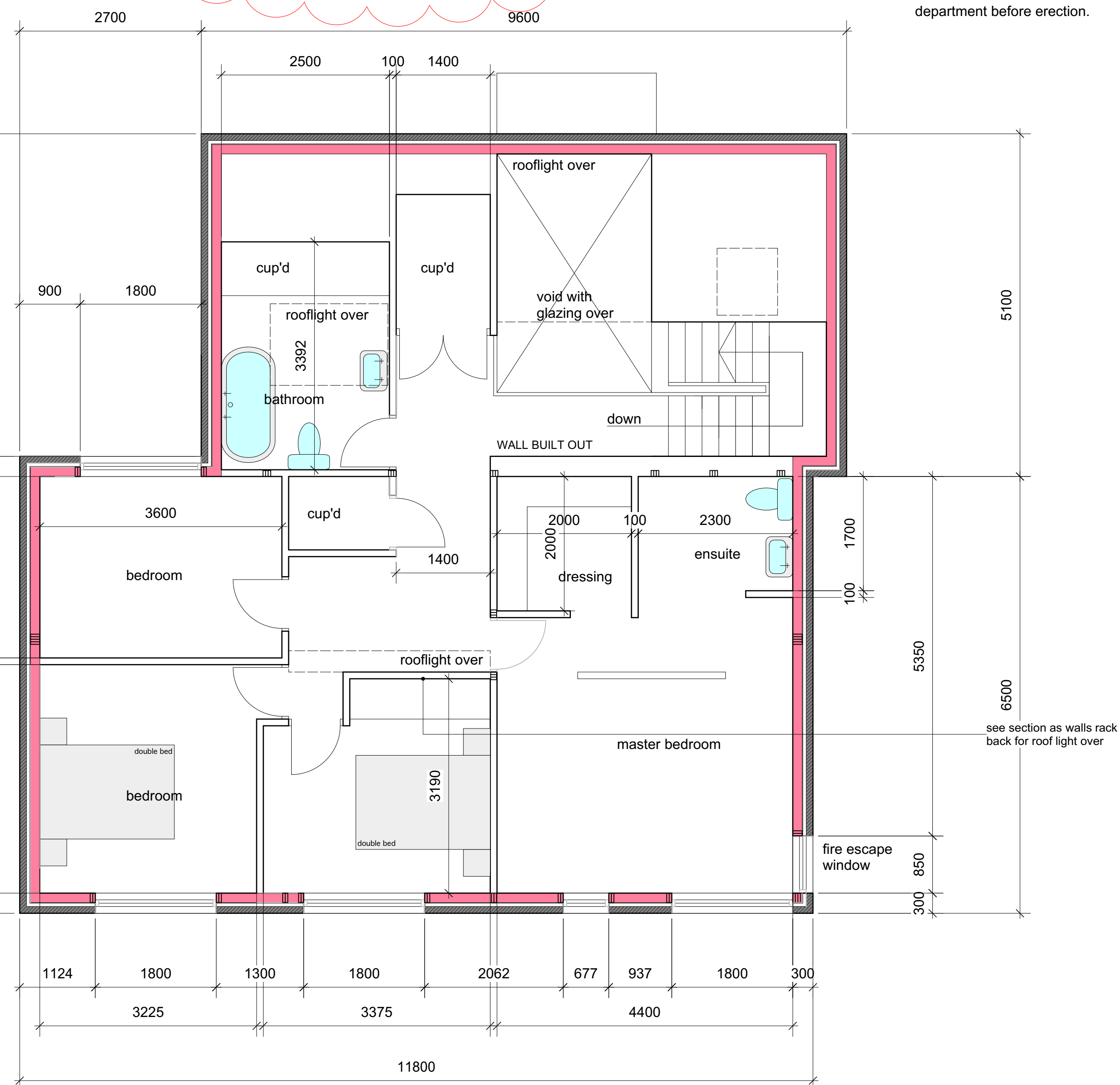
to be read with Threshold detail and recessed jamb detail
George and co will not except any claims against for damp or cold bridging unless built in accordance with details. Contractor to assume liability and costs if details are not conformed to.

3 courses of engineering bricks are to be laid under the DPC

Concrete lintels over are not acceptable, to be Catnic or IG lintels, see specification



WALL JAMB (1:5)



FIRST FLOOR PLAN

to be read with recessed jamb detail
George and co will not except any claims against for damp or cold bridging unless built in accordance with details. Contractor to assume liability and costs if details are not conformed to.

Concrete lintels over are not acceptable, to be Catnic or IG lintels, see specification

- 300mm cavity walls comprising:-
- 19mm render to external
 - 3 courses of engineering brickwork below dpc, to be blue/black only.
 - 100mm blockwork and render outer leaf.
 - 50mm cavity.
 - 9mm plywood sheathing bonded to timber studs.
 - 140 x 38mm timber frame stud inner leaf to timber frame manufacturer's design and spec.
 - insulation inbetween studs to inner leaf, to timber frame manufacturer's design and spec.
 - 140mm mineral wool between the timber studs and 25mm Kingspan/Celotex PIR internally
 - internal load barring partitions as timber frame manufacturer's design and spec.

- 150 x 215mm blockwork below DPC inner leaf to cavity walls.
- 100 x 215mm blockwork below DPC to internal load barring partition.
- 215mm block flat below DPC to dwarf walls internal load barring partition.

- **NOTE:** Timber frame manufacturers structural details to be submitted to the Building Control department before erection.

A. revised wall spec - 24.10.2023

Proposed new dwellings and Granny annex at Park Place, Troedyrhiw
For Mr and Mrs Birch

604.011A		PLANS	
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