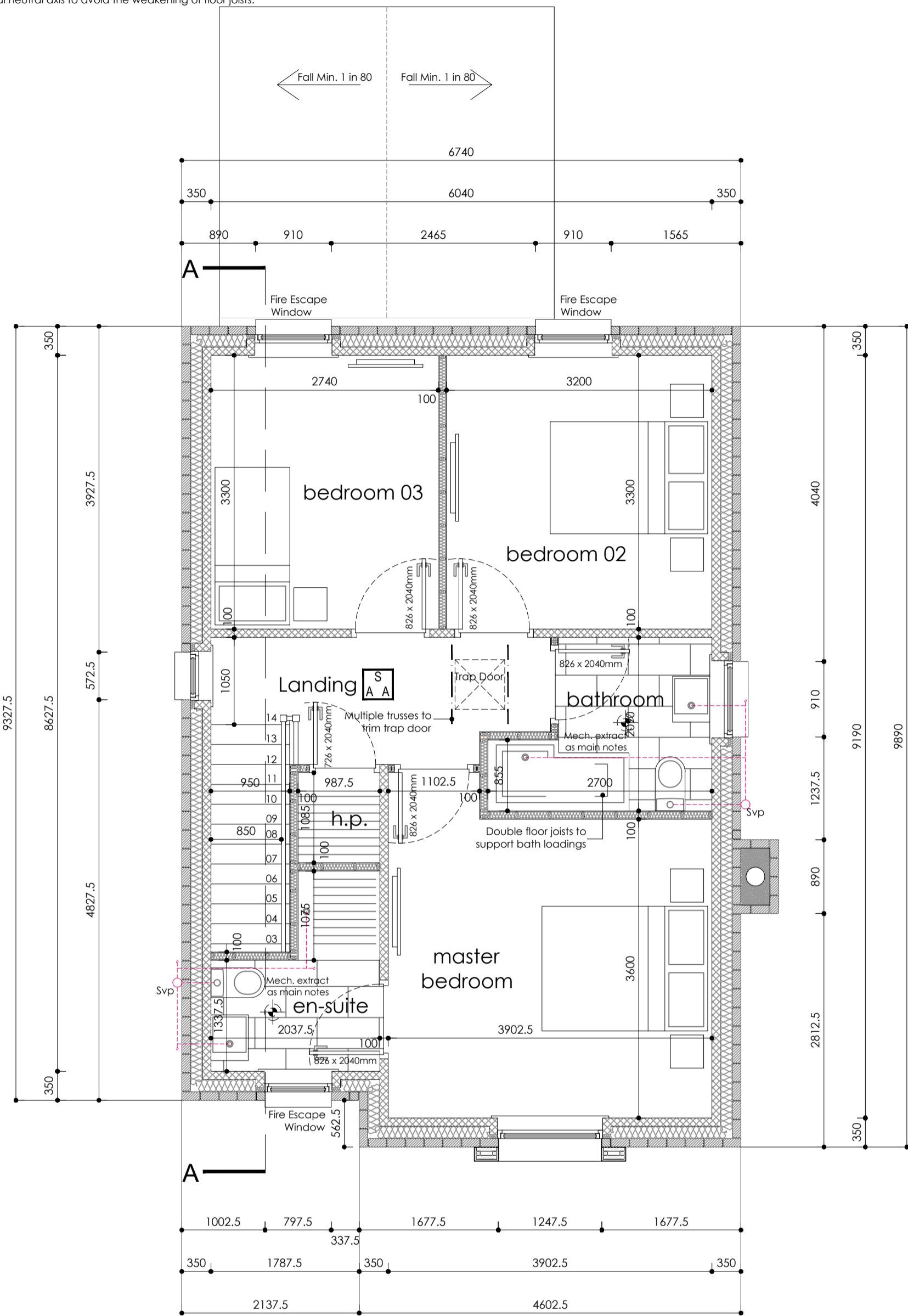


All first floor openings to be fitted with deep seal traps. Showers to be fitted with removable traps.

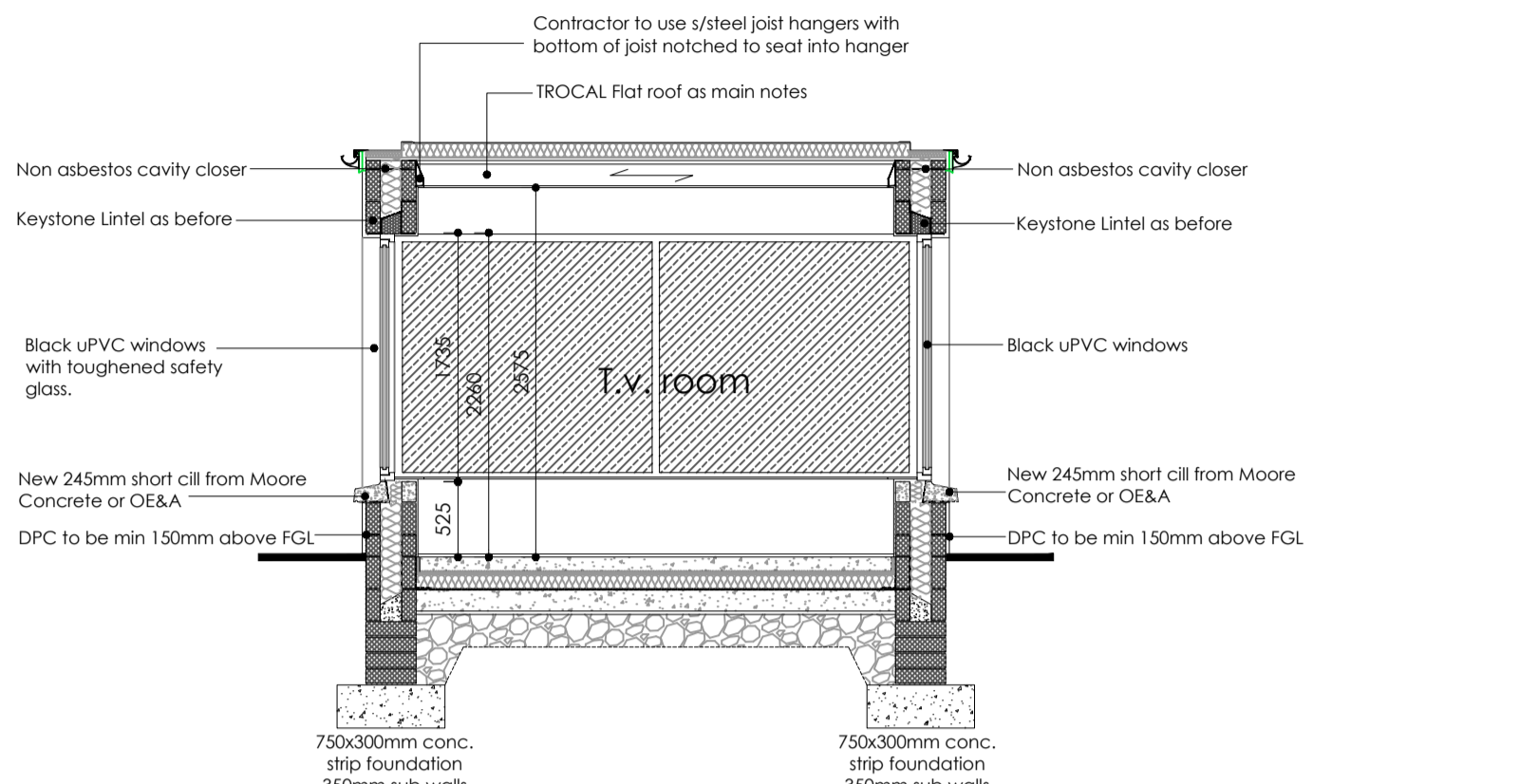
Rooding eyes to be provided at all changes in direction of sanitary pipework.

Where pipes pass through floor joists they shall pass through the central neutral axis to avoid the weakening of floor joists.

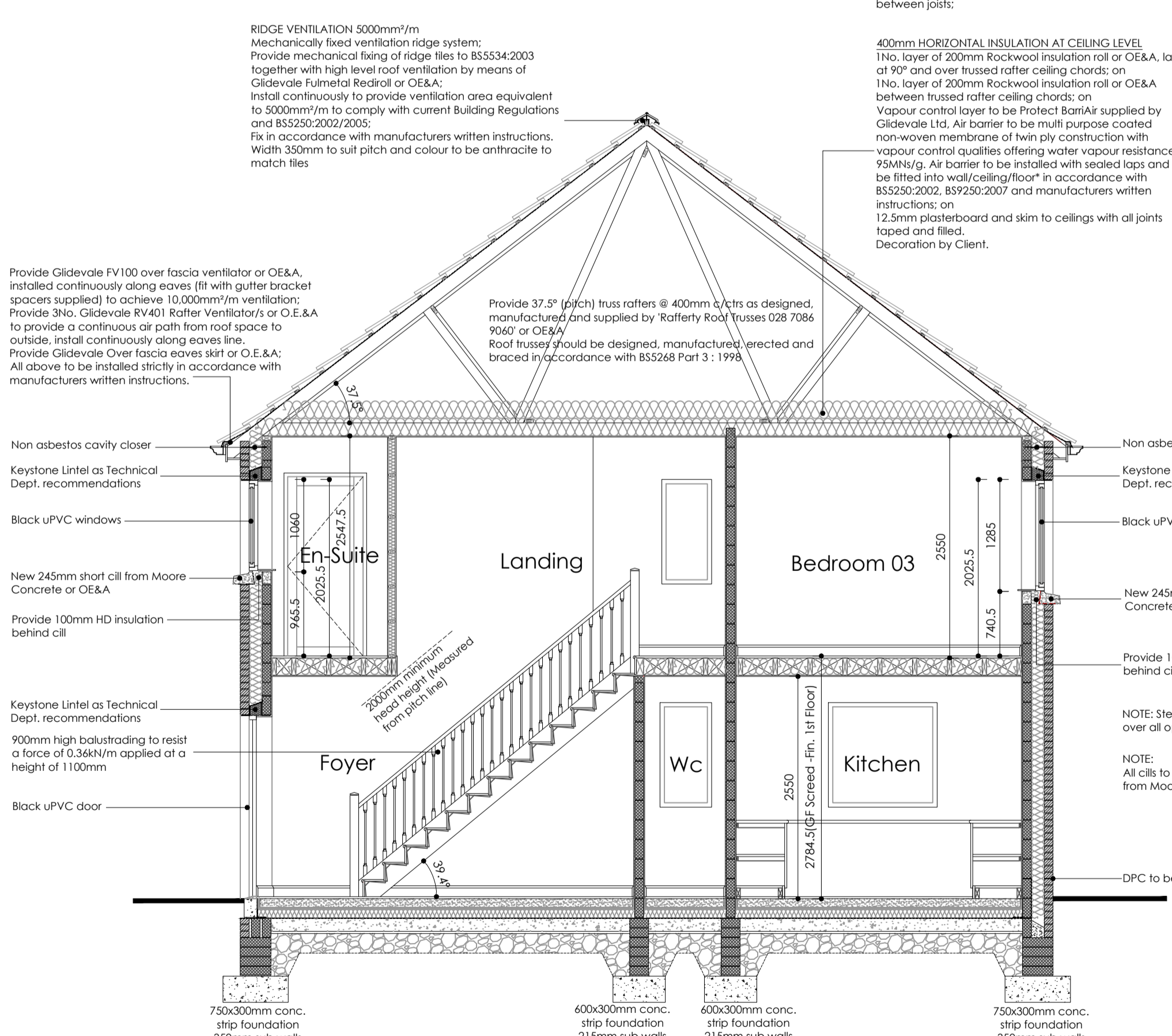


Proposed first floor plan  
51 m. sq.  
54m. sq

CLEARSPAN	DEPTH	TOP REINF	BAR DIA.	BOTTOM REINF	BAR DIA.
0.000	15mm	1No.	10mm		
0.900	15mm	1No.	10mm		
1.200	15mm	1No.	12mm		
1.500	215mm	1No.	12mm		
1.800	215mm	2No.	12mm		
2.100	215mm	2No.	12mm		
2.400	215mm	1No.	12mm	2No.	16mm
2.700	215mm	1No.	12mm	2No.	16mm
3.000	300mm	1No.	16mm	2No.	16mm
3.600	300mm	1No.	19mm	2No.	25mm



Section B-B



Section A-A

- 17: CONCRETE STRIP FOUNDATIONS**  
Foundations to be 750x300mm for 350mm external cavity walls (unless specified by Structural Engineer or otherwise). Width of foundations to also be in accordance with table 4E.1 of Technical Booklet D 2012.  
Depth to be determined on site, but, underside of foundation to be min 450mm below external ground level if prolonged exposure to frost is not envisaged.  
All foundations to be excavated to a firm bearing strata.  
There should not be made ground or wide variation in type of subsoil within the loaded area or weaker type of soil at such a depth below the soil on which the foundation rests as could impair the stability of the structure.  
The foundations should be situated centrally under the wall.  
Mass concrete for the foundations should be in chemically non-aggressive soil, composed of Portland Cement to BS EN 197-1 & 2 and fine and coarse aggregate conforming to BS EN 12620 composed of cement to IS: 1: 1991 and fine and coarse aggregate conforming to IS: 5: 1990.  
Foundations stepped on elevation should overlap by either twice the height of the step or by the thickness of the foundation or 300mm, whichever is greater (see Diagram 4E.2 Technical Booklet D 2012).  
Foundations are designed for Soil Type 3 or better, Table 4E.1 Technical Booklet D 2012. If soils of this type are not found at normal levels, or new foundation design, based on a soil analysis report, shall be submitted to Building Control.  
The Building Control Officer must approve foundation excavations prior to Contractor pouring of the concrete and there again after.
- 18: SOLID FLOOR CONSTRUCTION**  
(To achieve min. U Value of 0.25 W/(m<sup>2</sup>K))  
Floor finish supplied and fitted by Client; on 100mm sand/cement screed, provide 25mm HD Xtratherm insulation or OE&A to perimeter of screed, on 1200 gauge polythene vapour control layer and turned up depth of screed at edges; on 100mm Xtratherm Thin-R XT/UF insulation or OE&A between studs and 25mm Xtratherm Thin-R XT/UF insulation or OE&A continuous layer over pipes (Total 125mm insulation thickness); on 1200 gauge DPM; on 150mm concrete sub-floor; on 25mm sand binding; on Min. 150-300mm selected and well consolidated hardcore at levels of 100mm max. and free from sulphates.  
All joints in DPM to be sealed and overlapped by min. 150mm.  
Wall DPC to be min. 150mm above FGL and cavity filling to be min 225mm from bottom of wall insulation.
- 19: CAVITY WALL CONSTRUCTION**  
(To achieve min. U Value of 0.30 W/(m<sup>2</sup>K))  
**EXTERNAL LEAF**  
External render in accordance with that stipulated on the Planning Approval and to be agreed with Client.  
100mm thick medium density concrete blockwork, to comply with BS 6073: Part 1: 1981.  
102.5mm facing brick constructed in stretcher bond with mortar colour to match as confirmed with Client.  
Facing bricks to be selected randomly from batches when constructing so that any Colour variation is not noticed.
- CAVITY**  
150mm Springvale Platinum Eco Bead OE&A. Contractor to provide vertical DPC to corners and joints as specified by Insulation Supplier/Manufacturer.  
All wall ties to be stainless steel type by Ancon or OE&A and to suit 150mm wide cavity.  
Ties to be placed at 750mm horizontal centres and 450mm vertical centres.  
Provide wall ties at 225mm vertical centres at all door and window reveals and at building corners.  
Wall ties and insulation to be installed strictly in accordance with manufacturers written guidelines.  
Cavities to be closed at eaves and verges with 12mm Supalux Board (non asbestos).
- INTERNAL LEAF**  
100mm thick medium density concrete blockwork to comply with BS 6073: Part 1: 1981.  
Scratch coat of 10mm sand/cement (6:1 part) with plasticiser added and 2 mm skim finish internally.  
Decoration by Client.  
Mortar used for walls shall be to BS 5628:Part1:1992 or cement-lime mortar composed of cement, lime, sand in proportions 1:1:6. No vertical chase shall be formed in any such wall to a greater depth than 1/3 of the thickness of the wall. No horizontal chase shall be formed in any such wall to a greater depth than 1/6 of the thickness of the wall.  
All lateral support to the end walls at both rafter and ceiling joist levels as follows: provide 30x3mm m.s. galvanised anchor traps fixed across and to a minimum of three rafters /ceiling joists at no greater than 1.8m c/c or as designed by manufacturer with ends of straps bolted securely into wall. Provide 150x45mm s/wood bridging where anchor strap span voids between rafters / ceiling joists.  
Provide all lateral support to the end walls at both rafter and ceiling joist levels as follows: provide 30x3mm m.s. galvanised anchor traps fixed across and to a minimum of three rafters /ceiling joists at no greater than 1.8m c/c or as designed by manufacturer with ends of straps bolted securely into wall. Provide 150x45mm s/wood bridging where anchor strap span voids between rafters / ceiling joists.
- 20: 100mm TIMBER STUD WALL CONSTRUCTION**  
To be 75x38mm s/wood timber studs (and sole plate) at 400mm c/c, vertically and 400mm c/c, horizontally with fixing battens at 450 and 1200mm from floor respectively for sockets, switches etc. battens to be 75x38mm partitions finished both sides with 12.5mm plasterboard bond & skim finish.  
Provide 75mm Rockwool insulation or OE&A insulation between studs.  
Use pressure impregnated sole plate and battens when constructed off a concrete floor slab.  
Decoration by Client.
- 21: 125mm STRUCTURAL TIMBER STUD CONSTRUCTION**  
To be 100x20mm s/wood timber studs (and sole plate) at 400mm c/c, vertically and 400mm c/c, horizontally with fixing battens at 450 and 1200mm from floor respectively for sockets, switches etc. battens to be 100x20mm partitions finished both sides with 12.5mm plasterboard bond & skim finish.  
Provide 100mm Rockwool or OE&A insulation between studs.  
Use pressure impregnated sole plate and battens when constructed off a concrete floor slab.  
Decoration by Client.
- 22: 100mm ACOUSTIC TIMBER STUD CONSTRUCTION**  
To be 75x38mm s/wood timber studs (and sole plate) at 400mm c/c, vertically and 400mm c/c, horizontally with fixing battens at 450 and 1200mm from floor respectively for sockets, switches etc. Battens to be 75x38mm partitions finished both sides with 12.5mm Gyproc WallBoard TEN plasterboard and skim to each face to achieve min density of 10kg/m<sup>2</sup>.  
Provide 75mm Rockwool insulation or OE&A insulation between studs.  
Use pressure impregnated sole plate and battens when constructed off a concrete floor slab.  
Decoration by Client.
- 23: INTERNAL FIRE SPREAD**  
The surface linings of both walls and ceilings to be Class 1
- 24: TIMBER FIRST FLOOR CONSTRUCTION**  
Floor finish supplied and fitted by the Client; on 22mm floor grade chip boarding to achieve 15kg/m<sup>2</sup> glued and screw fixed; on 50x200mm C16 timber floor joists @ 400mm c/c's with 2No. bracing at 1/3 span.  
Joists to be supported using stainless steel joist hangers to suit wall type and size of joist ensuring min. 75mm bearing to both wall and joist.  
Hangers to be fitted tight to wall surface, have timber notched into bottom of hanger, max. 6mm between cut joist end and face of hanger and all fitted as per manufacturers written guidelines.  
Pack space between floor joists 200mm Rockwool insulation or OE&A; on 12.5mm Gyproc WallBoard TEN plasterboard and skim to ceilings with all joints taped and filled (plasterboard min. mass per unit area 10kg/m<sup>2</sup>).  
Decoration by Client.
- 25: FIRST FLOOR STRAPPING**  
30x2mm galvanised mild steel straps at 2m max. centres.  
Straps to be notched into top of min. 3No. joists and fixed to each joist using 2No. screws.  
Where external walls are parallel with structural timbers support straps on min. 38mm thick noggin;s.  
Provide full depth packing between wall and timber joist at strap locations;  
No straps should be fitted to perpendicular joints in the blockwork.
- 26: STAIR CONSTRUCTION**  
14 No. risers @ 197.52mm, Goings @ 240.00mm.  
Total rise of stairs = 2884.5mm  
Star pitch 39.4°  
2R + G = 652.5 (to be between 550 - 700)  
Clear stair width to be 850mm between handrails.  
Dimensions are to be checked on site prior to the forming/manufacturing and fixing of staircase and any deviations brought to the attention of the manufacturer of the staircase and Architect.  
Newell post, balustrade, handrails & spindles to be manufactured from first grade American White Oak.  
Goings, risers and strings to be h/wood if covered or first grade American White Oak if exposed and sized accordingly.  
Client to confirm before manufacture.  
Handrail and balustrades to be 900mm above pitch line of staircase and landings respectively and be positioned 50mm from wall surface in order for them to be easily grasped.  
Balustrade is to be constructed so as not to allow the passage of a 90mm dia. sphere and so as not to allow children to readily climb up on it (therefore no horizontal members).  
Head height of 2000mm to be provided over entire width and length of stairs measures vertically above pitch line of stair and to include landing area at top and bottom of stair.  
Internal guarding to be capable of withstanding a minimum horizontal force of 0.36 kN/m<sup>2</sup> applied 1100mm above FFL.  
External guarding to be capable of withstanding a minimum horizontal force of 0.74 kN/m<sup>2</sup> applied 1100mm above FFL.
- 27: ROOF CONSTRUCTION**  
(To achieve min. U Value of 0.20 W/(m<sup>2</sup>K))  
Roof ties - Grey flat plain : on 50x38mm softwood vac-vac treated battens to BS 5534: Part1; on Protect V400 Vapour Intermediate roofing felt to have a minimum horizontal / head lap of 225mm.  
Timber roof trusses at 400mm c/c, as per section, 100x50mm timber wallplate to be securely fixed to walls by m.s. straps 30x5x1000mm long of 1.5m centres, screwed twice to wallplate and fixed to blockwork with min. 5no. secure fixings.  
400mm HORIZONTAL INSULATION AT CEILING LEVEL  
1No. layer of 200mm Rockwool insulation roll or OE&A laid at 90° and over trussed rafter ceiling chords; on 1No. layer of 200mm Rockwool insulation roll or OE&A between trussed rafter ceiling chords; on Vapour control layer to be Protect BarriAir supplied by Gildewale Ltd. Air barrier to be multi purpose coated non-woven membrane of twin ply construction with vapour control qualities offering water vapour resistance of 95MNs/g. Air barrier to be installed with sealed laps and to be fitted into wall/ceiling/floor" in accordance with BS5250:2002, BS9250:2007 and manufacturers written instructions; on 12.5mm plasterboard and skim to ceilings with all joints taped and filled.  
Decoration by Client.
- PITCHED INSULATION AT RAFTER LEVEL**  
100mm Xtratherm XT/PR Thin-R Pitched Roof insulation or OE&A between rafters, on 40mm Xtratherm XT/PR Thin-R Pitched Roof insulation or OE&A below rafters, on Vapour control layer to be Protect BarriAir supplied by Gildewale Ltd. Air barrier to be multi purpose coated non-woven membrane of twin ply construction with vapour control qualities offering water vapour resistance of 95MNs/g. Air barrier to be installed with sealed laps and to be fitted into wall/ceiling/floor" in accordance with BS5250:2002, BS9250:2007 and manufacturers written instructions; on 12.5mm plasterboard and skim to ceilings with all joints taped and filled.  
Decoration by Client.
- 28: ROOF STRAPPING**  
Fit straps under rafters and over ceiling joists with horizontal noggin;s (min. 38mm thick) under each and over min. 3No. rafter/joist locations.  
Fit each strap with min. 75mm screws with at least 1No. in third rafter.  
Provide full depth packing between wall and timber joist at strap locations.  
No straps should be fitted to perpendicular joints in the blockwork.
- 29: FLAT ROOF CONSTRUCTION (lead to falls)**  
(To achieve max. U Value of 0.18 W/(m<sup>2</sup>K))  
Roofing sheet Tropic Type S. Slate grey installed by approved Tropic installer and turned up wall min. 150mm using Tropic Metal and Lead counter flashing, also provide 25mm of Xtratherm FR-ALU insulation dressed up between upstand and external face of blockwork to minimise cold bridging; on Provide 120mm Xtratherm FR-ALU insulation or OE&A; on 22mm marine grade plywood; on 50/5 x 50mm treated firing pieces (to achieve minimum falls of 1 in 80; on 50x170mm C16 timber joists @ 400mm c/c's; on Vapour control layer to be Protect BarriAir supplied by Gildewale Ltd. Air barrier to be multi purpose coated non-woven membrane of twin ply construction with vapour control qualities offering water vapour resistance of 95MNs/g. Air barrier to be installed with sealed laps and to be fitted into wall/ceiling/floor" in accordance with BS5250:2002, BS9250:2007 and manufacturers written instructions; on 12.5mm plasterboard and skim finish.  
Decoration by Client.
- 30: CHIMNEY CONSTRUCTION**  
Chimneys to have Class 1, 225mm clay rebated socket flues lined with sockets placed upmost and encased/surrounded in min 50mm Vermiculite.  
Liners to BS 1181-1971 (1977). Ref. to spec and details.  
Provide 38mm min. clearance around chimney for all combustible materials.  
Chimney Pots to be Beaded Flue terminals by RedBank Manufacturing Company Ltd. or OE&A  
Pots to be fitted with black galvanised crow guards.  
Install Code 5 Lead preformed tray, coated on both sides with bitumen and placed at correct level to suit position on roof.  
Install Code 4 Lead apron and Code 5 Lead cover flashing to front of chimney stack.  
Refer to drawing for rear of chimney information if required.  
The lead apron flashing should be lapped into lead tray within chimney stack.  
Install Code 4 Lead soakers and Code 5 Lead stepped flashings to sides of chimney.  
All flashings to be coated with protective oil to avoid the staining, 100mm concrete coping to all stacks with 100mm overhang and also mastic to underside.  
All pots to be centred on stack/coping in both directions.  
All lead work to be in accordance with Lead Sheet Association Manual.

Revision details:


Project: **proposed erection of residential development comprising of 14 no. detached dwellings & garages at lands off gilpinstown road, lurgan**

Client: Skyline Planning Consultants Ltd

Drawing: Working drawing: House Type A4  
First floor plan & Sections

Drawing no: 13      Scale: 1 - 50      Revision:

Date: Nov '16      Project no: 15 - 28      Drawn by: c.mck

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