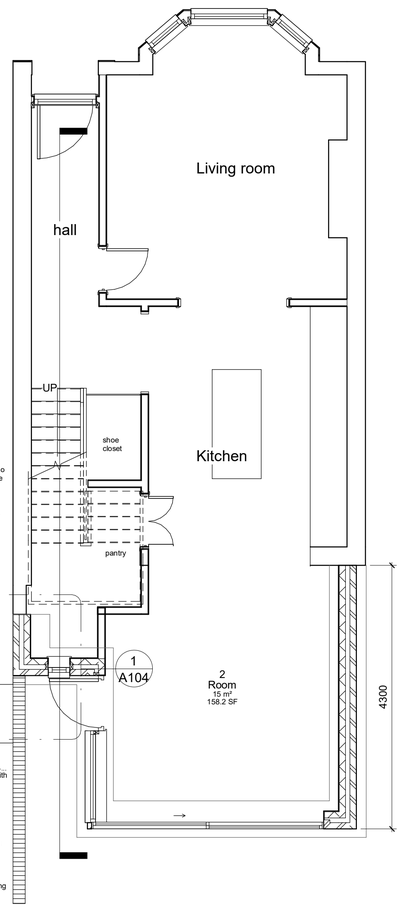
0m 1m 2m 3m 4m 5m

VISUAL SCALE 1:50 @ A1



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.

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.

EXISTING STRUCTURE
Existing structure including foundations, beams, walls and lintels carrying new and altered loads are to be exposed and checked for adequacy prior to commencement of work and as required by the Building Control Officer.

ROOF LIGHTS
Min U-value of 1.6 W/m²K.
Roof-lights to be double glazed with16mm 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.

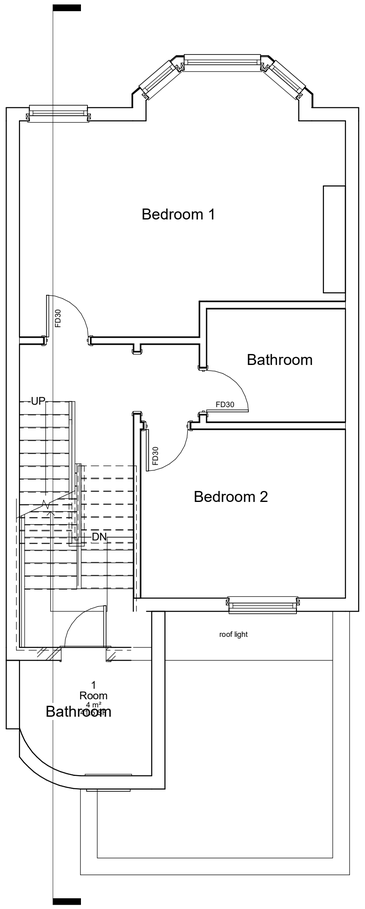
RAINWATER DRAINAGE
New rainwater goods to be new 110mm UPVC half round gutters taken and connected into 68mm dia UPVC downpipes. Rainwater taken to new soakaway, situated a min distance of 5.0m away from any building, via 110mm dia UPVC pipes surrounded in 150mm granular fill. Soakaway to be min of 1 cubic metre capacity (or to depth to Local Authorities approval) with suitable granular fill and with geotextile surround to prevent migration of fines. If necessary carry out a porosity test to determine design and depth of soakaway.

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.

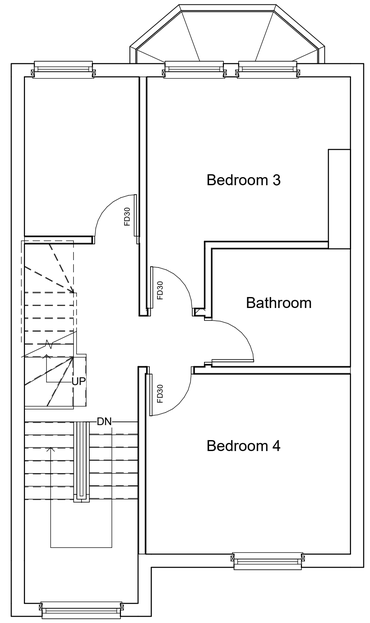
INTERNAL LIGHTING
Install low energy light fittings that only take lamps having a luminous efficiency greater than 45 lumens per circuit watt and a total output greater than 400 lamp lumens. Not less than three energy efficient light fittings per four of all the light fittings in the main dwelling spaces to comply with Part L of the current Building Regulations and the Domestic Building Services Compliance Guide.

HEATING
Extend all heating and hot water services from existing and provide new TVRs to radiators. 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.

Existings Ground floor
1 : 50



Existings First floor
1 : 50



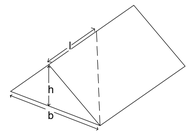
Existings Second floor
1 : 50

0m 2m 4m 6m 8m 10m

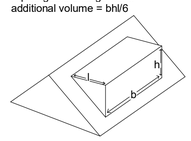
VISUAL SCALE 1:100 @ A1

PLANNING NOTE
A loft conversion for your house is considered to be permitted development and not requiring an application for planning permission, subject to the following limits and conditions:

A volume allowance of 40 cubic metres additional roof space for terraced houses*
A volume allowance of 50 cubic metres additional roof space for detached and semi-detached houses*
No extension beyond the plane of the existing roof slope of the principal elevation that fronts the highway
No extension to be higher than the highest part of the roof
Materials to be similar in appearance to the existing house
No verandas, balconies or raised platforms
Side-facing windows to be obscure-glazed; any opening to be 1.7m above the floor
Roof extensions not to be permitted development in designated areas
Roof extensions, apart from hip to gable ones, to be set back, as far as practicable, at least 20cm from the eaves
*Bear in mind that any previous roof space additions must be included within the volume allowances listed above. Although you may not have created additional space, a previous owner may have done so.
(Ref - planningportal.gov.uk)



Hip-to-gable enlargement:
additional volume = bhl/6

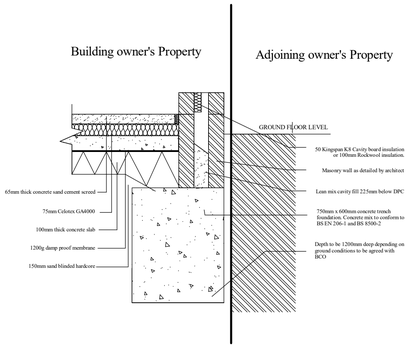


Box dormer enlargement:
additional volume = bhl/2

$$\frac{5.322 \times 2.137 \times 3.835}{2} = 21.80$$

Total cubic volume = 21.80

Volume Calculation
1 : 50



ECCENTRIC FOUNDATION DETAIL

BENJAMIN ASSOCIATES LTD
CIOB Chartered Building Consultancy

31 Danemead Grove
Northolt
Middlesex
UB5 4NX

Tel 0208 423 0608
Fax 0208 357 9714

Chartered Institute of Architectural Technologists
Registered Practice

www.benjaminassociates.co.uk

GENERAL
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ALL DIMENSIONS AND LEVELS TO BE CHECKED ON SITE AND ANY DISCREPANCIES TO BE REPORTED IMMEDIATELY.
CONTRACTOR IS RESPONSIBLE FOR SETTING OUT THE WORKS
ALL STRUCTURAL WORK TO BE CARRIED OUT IN ACCORDANCE WITH ENGINEER'S DESIGN AND DETAILS
DO NOT SCALE DRAWINGS
DRAWINGS PRODUCED FOR THE PURPOSE OF OBTAINING BUILDING REGULATIONS APPROVALS ONLY AND DO NOT CONSTITUTE FULL WORKING DRAWINGS

Foundations: concrete strip foundation to be 600mm widewith conc. mix 1:2:4. Foundation depth to be min 1200mmbelow lowest ground level or to level of adjacent drains,whichever is deeper and 600mm below any roots found intrench or as indicated.Sulphate resisting cement to be used in all works below D.P.C level. Engineering bricks below D.P.C

Drainage: All internal pipes above ground level to be PVC,sink to have 50mm dia. up to 4m length, basin to have32mm dia. up to 1.7m Length, shower to have 50mm dia.w.c to have 100mm dia pipe. All traps to be 75mm deep.Provide rodding eye at change of direction, ground floor wc to have sub stack. Sub stack terminal to be higher than any over-flow of sanitary appliances. All above ground fould drainage to be designed to BS 5572 and installed in accordance with BS 8000:part13, section 3 and BS 5572.

All drains below ground level to be 100mm dia. Hepsleveor similar clay pipes laid to min 1:40 Fall and in accordanceto manufactures instructions.

All drains under building to be protected with P.C conc. lintels where passing through wall.

Existing position of drainage & manholes to be investigated on site during the construction. The new drainage laid to suit position of MH and invert level and to be approved by building control surveyor. Internal manhole to be completely removed.

Rainwater disposal: Provide 100mm pvc half round guttering with 63mm pvc downpipe discharging to roddable backinlet gullies and connected to existing urface water drains.The position of the surface water drains is to be loactedon commencement of work if not readily ascertainable and final arrangement to be agreed with L.A surveyor.

Ventilation: Rapid ventilation to all habitable rooms and sanitary accommodation if separate from bathroom to be minimum 1/20th of floor area

Background ventilation to all habitable rooms to have 8000 sq.mm kitchen to have 4000sq.mm sanitary accommodation to have 4000 sq.mm.

Mechanical extract ventilation - kitchen to have 30 litres/sec. in or adjacent to hob. 60 litres/sec elswhere. Shower/w.c and utility to have extract fan capable of extracting 15 litres/sec with 15 minutes overrun connected to light switch.

Doors and windows: all new external doors and windows to be aluminium double glazed with night ventilation of mimum arae 1000sq.mm

All new doors & side panels to have saftey laminated glazing between finished floor level and 1500mm above that level. Windows and partitions to have laminated safety glazing between finished floor level and 800mm above that level.
Habitable room must have emergency egress window of opening mimum 450mm wide and 750mm high not higher than 1100mm
All double glazed window units to 28mm with 6.4mm outer laminated glass and inner 4mm clear glass, 17.6mm air gap, argon filled and a "soft" low- E coating. double glazed unit to achieve 'U' value of at least 1.6W/M.sq.K. windows to comply with L1A 2006.

Floor: 75mm 1:4 cement/sand screed with anti crash wire mesh on 250 gauge polythene vapour barrier on TF 80mmKingspan 'Thermafloor' rigid slab insulation (P/A Ratio 0.8 use TF 80mm to achieve U-Value 0.22) laid in accordancewith manufacturer's instructions on 150mm thick RC (A142 mesh) 'FND2' conc. slab on 1200 gauge polythenD.P.M on 50mm sand blinding on compacted DOT Type 1granular fill hardcore. Slab to be thickened below internalwalls. 25mm thickness of insulation board turned up all walls faces to FFL over DPM upstand. Polythine brought up to edges of slab to LAP DPC in walls and all joints lapped and sealed.

Wall: To achieve minimum U Value of 0.28W/m²K
New cavity wall to comprise of 105mm facing brick to match existing. Full fill the cavity with 100mm Rockwool Cavity insulation as manufacturer's details. Inner leaf to be 100mm lightweight block, K value 0.16, (Aircrete, Celcon solar, Toplock toplite standard). Internal finish to be 12.5mm plasterboard on dabs. Walls to be built with 1:1:6 cement mortar.

Wall ties to be double triangle stainless steel evenly spaced at 750mm centres horizontally staggered in alternate courses an 450mm centres vertically. Provide additional ties beneath the lowest row of insulation batts anddouble at reveals

Catnic metal lintels to external openings and filled with insulation. Wall connector new wall connected to existing wall with 'Furfix' steel connector or similar. Polysulphide sealant pointing to external joints.

Stud partition to 50 x 100 studs at 400c/c with 12.5mm plaster board skim finished. 50x100mm base plate of stud partition supported on floors joists with 50 x 100 noggings@ 400 c/c. void with partition filled with rockwool rollbatts.

Damp Proof Course: Hessian based felt or similar horizontal and vertical D.P.C. to walls D.P.C. 150mm minimum above all adjoining ground level, D.P.C under window cil and reveals
All damp proof elements to be lapped and bonded with existing D.P.C

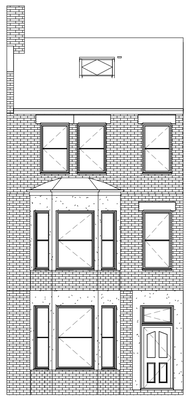
Flat Roof (Warm): (imposed load max 1.0 kN/m² - dead load max 0.75 kN/m²)
To achieve U value 0.18 W/m²K
12.5mm spa solar reflective chippings to achieve aa designated fire rating for surface spread of flame bedded in bitumen on three layer felt to BS 6229:2003 on 22mm external quality ply (ply optional, see manufacturer's details) over 120mm Celotex Crown-Up.
Insulation bonded to VCL fixed to 22mm exterior grade plywood on firrings to give 1:60 fall on 47 x 195mm C24 timber joists at 400 ctrs to give a max span of 4.51m (see engineer's details for sizes). Ceilings to be 12.5mm plasterboard over vapour barrier with skim plaster finish.
Provide restraint to flat roof by fixing of 30 x 5 x 1000mm ms galvanised lateral restraint straps at maximum 2000mm centres fixed to 100 x 50mm wall plates and anchored to wall.

Electrical: Electrical cables should be fixed to the structure above the insulation, so that they can dissipate heat. PVC insulated cables should not be in direct contact with any expanded polystyrene insulation, recessed fittings designed for compact fluorescent or low voltage tungsten halogen lamps should only be used within enclosure, set between the joists, to dissipate heat. If recessed light fittings are used, ensure that the floor maintains a full half hour period of fire resistance.

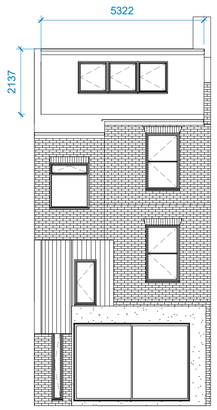
All electrical works required to meet the provision of part P (electrical safety) must be designed, installed, inspected and tested by a person competent to do so.

Prior to electrical completion the council should be satisfied that the part P has been complied with, this may require an appropriate BS 7671 electrical installation certificate to be issued for the work by a person competent to do so.

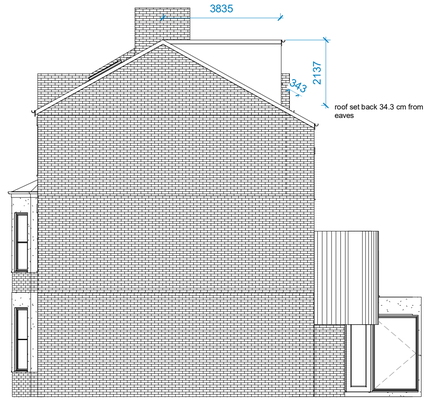
Lighting and electrical works: Lighting to new extension and loft conversion to be efficient lighting that only take lamps luminous of efficency greater than 40 luminious per circuit-watts. All electrical works must be designed, installed, inspected and tested by a competent person.



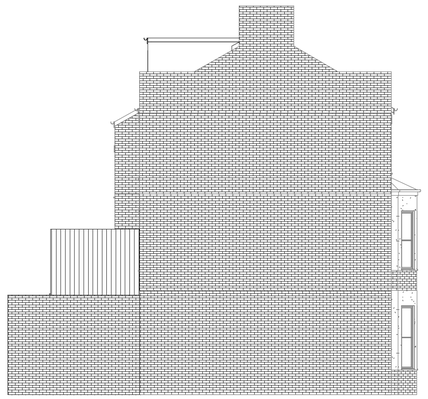
Proposed Front Elevation
1 : 100



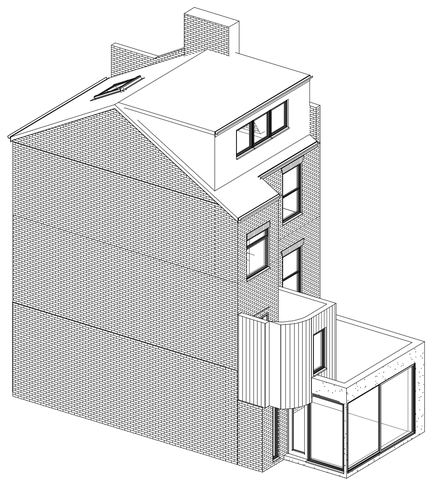
Proposed Rear Elevation
1 : 100



Proposed side Elevation
1 : 100



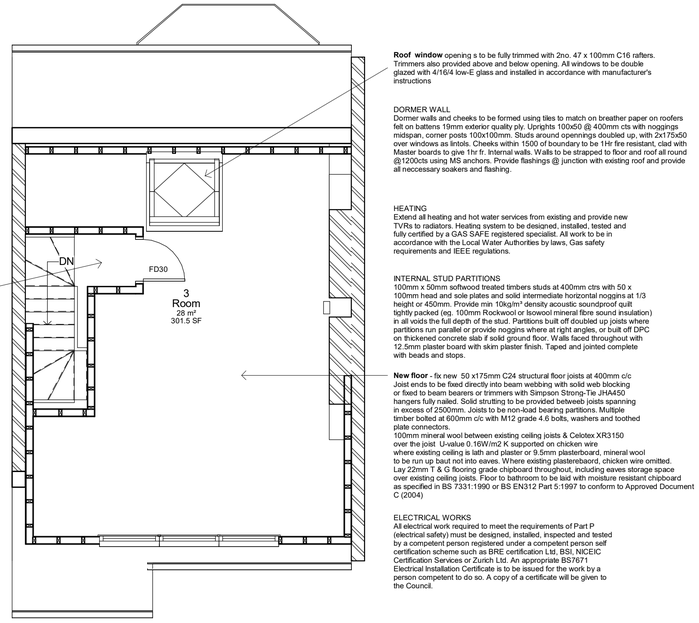
Proposed other side
1 : 100



Client	Sean McLoughlin
Address	35 Lupton Street London NW5 2HS
Project name	Loft Conversion single storey rear and part first storey rear
Project number	35/LUP/021
Date	January 2021
Drawn by	M.Benjamin
Checked by	MSB
Sheet number	A101
Scale	As indicated

0m 1m 2m 3m 4m 5m

VISUAL SCALE 1:50 @ A1



BACKGROUND AND PURGE VENTILATION
Background ventilation - Controllable background ventilation via trickle vents to BS EN 13141-3 within the window frame to be provided to new habitable rooms at a rate of min 5000mm²; and to kitchens, bathrooms, WCs and utility rooms at a rate of 2500mm²
Purge ventilation - New windows/rooflights to have openable area in excess of 1/20th of the floor area, if the window opens more than 30° or 1/10th of the floor area if the window opens less than 30°
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.

Provide mains-operated linked smoke alarm fitted with battery reserve supply. Approved doc B

Drainage - Bath, basin & shower waste pipes to be 40mm diameter. Runs up to 4m to be 50mm diameter all connected separately with water seal traps to existing SVP or new 100mm common branch pipe (1:40 fall). Cleaning access to be provided at change of pipe direction. Opposed connections to SVP to be offset at least 200mm
Vent pipe within 3m of any openable window to be extended 900mm above window and approved with cage or perforated cover to conform to guidance in Approved Doc H.

Walls - stair enclosure 47 x 100mm vertical studs at 400mm c/c fixed to head plates with staggered noggins. Both sides with 12.5mm plasterboard with plaster skim coat finish to provide 30-min fire resistance

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.

Beams install universal beams & columns in accordance with structural engineer's design. Beam ends to bear on padstones or mild steel bearing plates. Plates or padstones to be built onto brickwork and bedded in 10mm thick mortar. Reinstate brickwork around beam ends and pack voids well with mortar.
Floor beams to provide 30-min fire resistance by caoling with intumenscent paint or by encassing in 2no. layers of 12.5mm plasterboard with staggered joints taped and filled. All new beams to stand 25mm (min) clear of existing ceiling.

Roof window opening s to be fully trimmed with 2no. 47 x 100mm C16 rafters. Trimmers also provided above and below opening. All windows to be double glazed with 4/16/4 low-E glass and installed in accordance with manufacturer's instructions

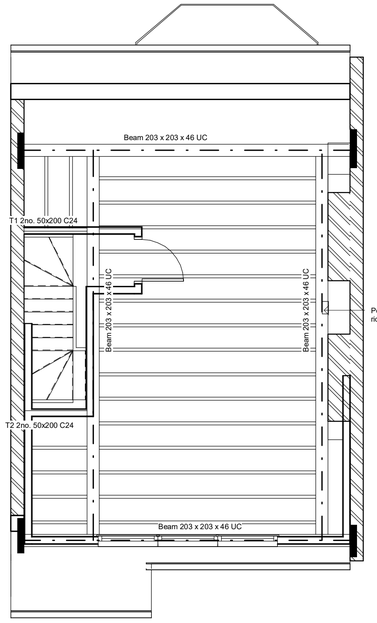
DORMER WALL
Dormer walls and cheeks to be formed using tiles to match on breather paper on roofers felt on battens 19mm exterior quality ply. Uprights 100x50 @ 400mm cts with noggings midspan, corner posts 100x100mm. Studs around openningps doubled up, with 2x175x50 over windows as lintols. Cheeks within 1500 of boundary to be 1Hr fire resistant, clad with Master boards to give 1hr fr. Internal walls. Walls to be strapped to floor and roof all round @1200cts using MS anchors. Provide flashings @ junction with existing roof and provide all neccessary soakers and flashing.

HEATING
Extend all heating and hot water services from existing and provide new TVRs to radiators. 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 by laws, Gas safety requirements and IEEE regulations.

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 noggins at 1/3 height or 450mm. Provide min 10kg/m³ 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 noggins 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.

New floor - fix new 50 x175mm C24 structural floor joists at 400mm c/c Joist ends to be fixed directly into beam webbing with solid web blocking or fixed to beam bearers or trimmers with Simpson Strong-Tie JHA450 hangers fully nailed. Solid strutting to be provided betweeb joists spanning in excess of 2500mm. Joists to be non-load bearing partitions. Multiple timber bolted at 600mm c/c with M12 grade 4.6 bolts, washers and toothed plate connectors.
100mm mineral wool between existing ceiling joists & Celotex XR3150 over the joist U-value 0.16W/m2 K supported on chicken wire where existing ceiling is lath and plaster or 9.5mm plasterboard, mineral wool to be run up baut not into eaves. Where existing plasterebaord, chicken wire omitted. Lay 22mm T & G flooring grade chipboard throughout, including eaves storage space over existing ceiling joists. Floor to bathroom to be laid with moisture resistant chipboard as specified in BS 7331:1990 or BS EN312 Part 5:1997 to conform to Approved Document C (2004)

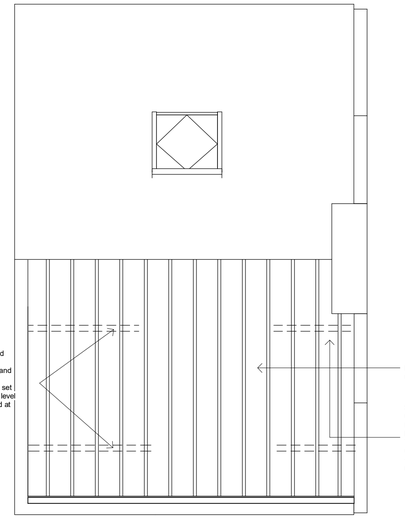
ELECTRICAL WORKS
All electrical work required to meet the requirements of Part P (electrical safety) must be designed, installed, inspected and tested by a competent person registered under a competent person self certification scheme such as BRE certification Ltd, BSI, NICEIC Certification Services 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 the Council.



Post supporting ridge beam

0m 2m 4m 6m 8m 10m

VISUAL SCALE 1:100 @ A1



Side walls - 750 x150 x30 x5mm 'L' Shaped Galv. steel restraint straps fixed to top of firrings/noggins bewteen joists & wall face and hooked over outer face of dormer wall
Tops of firrings to be notched and noggins set down so that top of straps and firrings are level -1200c/c required indicated thus positioned at mid-point of wall

Flat roof timbers 50 x 175 strength class C24 @ 400mm c/c

Side walls - 750 x150 x30 x5mm 'L' Shaped Galv. steel restraint straps fixed to top of firrings/noggins bewteen joists & wall face and hooked over outer face of dormer wall.
Tops of firrings to be notched and noggins set down so that top of straps and firrings are level -1200c/c required indicated thus positioned at mid-point of wall

Proposed Loft Floor
1 : 50

Structral Loft Floor
1 : 50

12mm mineral chippings bedded in bitumen on 3no. Layers of polyester base roofing felt (BS747) hot bedded & laid to BS8217. Base layer to be single-ply G3 felt with 25mm dia holes equally spaced & partially bonded to Celotex TD3116 warm deck insulation boards bedded on mastic beads at joints according to manufacturers guide to achieve vapour check. U-value 0.20W/m2K
Roof deck to be 18mm exterior ply on tapered firrings to achieve 1:40 fall on 50x175mm flat roof joists (C24) at 400mm c/c. Flat roof joists to be fixed into roof beam webbing. Roof joists at dormer face to be fixed with holdingdown straps to window header

Ridge beam 152 x 152 x 37UC

12.5mm plasterboard on polythene vapour barrier on 25mm Celotex GA 3060 rigid insulation fixed to rafters with Celotex GA3050 fitted between rafters. 50mm air gap to cold side of insulation U-value 0.20W/m2K

Ventilate the 50mm cavity above the insulation

Existing roof structure to be provided with proprietary ventilators or vents to existing eaves to achieve equivalent continuous ventilation of 25mm (eaves).Tile or ridge vents to give equivalent of 5mm continuous ventilation (ridge). Provide mesh to all vents

47 x 100mm vertical studs (C16) fixed to sole and head plate & header beams. External sheathing to be 11mm OSB3 cloaked with breather membrane. 38 x 25mm treated softwood tiling battens min length 1200mm to be fixed through membrane OSB to studwork at 114mm gauge (max) with plain tile hanging (265 x 165mm). Fix soaker flashing as required to all roof & window junctions on code 4 lead sheet.
Where external stud wall has an area greater the 1m2 and is within 1000mm of relevant boundary fix 9mm Promat Supalax boarding between sheathing material and underlay/tile battens to the outside, finish internally with 12.5mm plasterboard with 3mm gypsum plaster finish.

Beam 203 x 203 x 46 UC

Beam 203 x 203 x 46 UC

Estimated floor-to-floor of 2720 mm gives 13 equal risers of 209mm and equal going of 245mm at 42-degree(max) pitch. Width 750mm
12.5mm plasterboard to stair soffit.
Headroom min 2000mm depending on position to conform to Approved Document K.
Handrail set at 900mm min above pitch line. No part of balustrade or staircase to allow passage of 100mm sphere, to conform to requirements of AD K.

2200

2200

Level 8
11490

Structral Lo
10990

Level 3
Proposed Loft Floor
8765

Existing Second floor
6394

Level 7
5250

Existing First floor
3247

Level 6
2542

Existing Ground floor
0

Section 1
1 : 50

Structral Loft roof
1 : 50

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DRAWINGS PRODUCED FOR THE PURPOSE OF OBTAINING BUILDING REGULATIONS APPROVALS ONLY AND DO NOT CONSTITUTE FULL WORKING DRAWINGS

Foundations: concrete strip foundation to be 600mm widewith conc. mix 1:2:4, Foundation depth to be min 1200mmbelow lowest ground level or to level of adjacent drains,whichever is deeper and 600mm below any roots found intrench or as indicated.Sulphate resisting cement to be used in all works below D.P.C level. Engineering bricks below D.P.C

Drainage: All internal pipes above ground level to be PVC,sink to have 50mm dia. up to 4m length, basin to have32mm dia. up to 1.7m Length, shower to have 50mm dia.w.c to have 100mm dia pipe. All traps to be 75mm deep.Provide rodding eye at change of direction, ground floor wc to have sub stack. Sub stack terminal to be higher than any over-flow of sanitary appliances. All above ground fould drainage to be designed to BS 5572 and installed in accordance with BS 8000:part13, section 3 and BS 5572.

All drains below ground level to be 100mm dia. Hepsleveor similar clay pipes laid to min 1:40 Fall and in accordanceto manufactures instructions.

All drains under building to be protected with P.C conc. lintels where passing through wall.

Existing position of drainage & manholes to be investigated on site during the construction. The new drainage laid to suit position of MH and invert level and to be approved by building control surveyor. Internal manhole to be completely removed.

Rainwater disposal: Provide 100mm pvc half round guttering with 63mm pvc downpipe discharging to roddable backinlet gullies and connected to existing urface water drains.The position of the surface water drains is to be loactedon commencement of work if not readily ascertainable and final arrangement to be agreed with L.A surveyor.

Ventilation: Rapid ventilation to all habitable rooms and sanitary accommodation if separate from bathroom to be minimum 1/20th of floor area

Background ventilation to all habitable rooms to have 8000 sq.mm kitchen to have 4000sq.mm sanitary accommodation to have 4000 sq.mm.

Mechanical extract ventilation - kitchen to have 30 litres/sec. in or adjacent to hob. 60 litres/sec elswhere. Shower/w.c and utility to have extract fan capable of extracting 15 litres/sec with 15 minutes overrun connected to light switch.

Doors and windows: all new external doors and windows to be aluminium double glazed with night ventilation of mimum area 1000sq.mm

All new doors & side panels to have saftey laminated glazing between finished floor level and 1500mm above that level. Windows and partitions to have laminated safety glazing between finished floor level and 800mm above that level.
Habitable room must have emergency egress window of opening mimum 450mm wide and 750mm high not higher than 1100mm
All double glazed window units to 28mm with 6.4mm outer laminated glass and inner 4mm clear glass, 17.6mm air gap, argon filled and a "soft" low- E coating. double glazed unit to achieve 'U' value of at least 1.6W/M.sq.K. windows to comply with L1A 2006.

Floor: 75mm 1:4 cement/sand screed with anti crash wire mesh on 250 gauge polythene vapour barrier on TF 80mmKingspan 'Thermafloor' rigid slab insulation (P/A Ratio 0.8 use TF 80mm to achieve U-Value 0.22) laid in accordancewith manufacturer's instructions on 150mm thick RC (A142 mesh) 'FND2' conc. slab on 1200 gauge polytheneD.P.M on 50mm sand blinding on compacted DOT Type 1granular fill hardcore. Slab to be thickened below internalwalls. 25mm thickness of insulation board turned up all walls faces to FFL over DPM upstand. Polythine brought up to edges of slab to LAP DPC in walls and all joints lapped and sealed.

Wall: To achieve minimum U Value of 0.28W/m²K
New cavity wall to comprise of 105mm facing brick to match existing. Full fill the cavity with 100mm Rockwool Cavity insulation as manufacturer's details. Inner leaf to be 100mm lightweight block, K value 0.16, (Aircrete, Celcon solar, Toplock toplite standard). Internal finish to be 12.5mm plasterboard on dabs. Walls to be built with 1:1:6 cement mortar.

Wall ties to be double triangle stainless steel evenly spaced at 750mm centres horizontally staggered in alternate courses an 450mm centres vertically. Provide additional ties beneath the lowest row of insulation batts anddouble at reveals

Catnic metal lintels to external openings and filled with insulation. Wall connector new wall connected to existing wall with 'Furfix' steel connector or similar. Polysulphide sealant pointing to external joints.

Stud partition to 50 x 100 studs at 400c/c with 12.5mm plaster board skim finished. 50x100mm base plate of stud partition supported on floors joists with 50 x 100 noggings@ 400 c/c. void with partition filled with rockwool rollbatts.

Damp Proof Course: Hessian based felt or similar horizontal and vertical D.P.C. to walls D.P.C. 150mm minimum above all adjoining ground level, D.P.C under window cil and reveals
All damp proof elements to be lapped and bonded with existing D.P.C

Flat Roof (Warm): (imposed load max 1.0 kN/m² - dead load max 0.75 kN/m²)
To achieve U value 0.18 W/m²K
12.5mm spa solar reflective chippings to achieve aa designated fire rating for surface spread of flame bedded in bitumen on three layer felt to BS 6229:2003 on 22mm external quality ply (ply optional, see manufacturer's details) over 120mm Celotex Crown-Up.
Insulation bonded to VCL fixed to 22mm exterior grade plywood on firrings to give 1:60 fall on 47 x 195mm C24 timber joists at 400 ctrs to give a max span of 4.51m (see engineer's details for sizes.). Ceilings to be 12.5mm plasterboard over vapour barrier with skim plaster finish.
Provide restraint to flat roof by fixing of 30 x 5 x 1000mm ms galvanised lateral restraint straps at maximum 2000mm centres fixed to 100 x 50mm wall plates and anchored to wall.

Electrical: Electrical cables should be fixed to the structure above the insulation, so that they can dissipate heat. PVC insulated cables should not be in direct contact with any expanded polystyrene insulation, recessed fittings designed for compact fluorescent or low voltage tungsten halogen lamps should only be used within enclosure, set between the joists, to dissipate heat. If recessed light fittings are used, ensure that the floor maintains a full half hour period of fire resistance.

All electrical works required to meet the provision of part P (electrical safety) must be designed, installed, inspected and tested by a person competent to do so.

Prior to electrical completion the council should be satisfied that the part P has been complied with, this may require an appropriate BS 7671 electrical installation certificate to be issued for the work by a person competent to do so.

Lighting and electrical works: Lighting to new extension and loft conversion to be efficient lighting that only take lamps luminious of effcency greater than 40 luminious per circuit-watts. All electrical works must be designed, installed, inspected and tested by a competent person.

Client	Sean McLoughlin
Address	35 Lupton Street London NW5 2HS
Project name	Loft Conversion single storey rear and part first storey rear
Project number	35/LUP/021
Date	January 2021
Drawn by	Author
Checked by	Checker
Sheet number	A102
Scale	1 : 50