1. Drawing are for Local Authority approval only.
2. Builder to check all dimensions on site.
3. Builder to measure all new steelwork, timber beams/joists and materials on site when ordering materials.
4. No responsibility is taken for checking legal ownership of site, covenants thereon and position of boundaries.
5. Appropriate party wall notice must be served in advance to, and any negotiation settlements prior to commencment of work in accordance with the 'Party Wall Act 1996'.
   (ARRANGED BY CONTRACTOR OR CLIENT)
6. All electrics to comply to IEE regulations.
7. All workmanship and materials to comply with the relevant British Standard Code of Practice, BBA certificate and manufacturers instructions.
8. Builder to investigate on site condition of existing party wall to provide adequate end bearing for new steelwork. Building inspector to approve on site.
9. Appointed Builder to investigate on site prior to commencement of any work exact run and location of existing foul drains to ensure
   that appropriate bridging of main drain branch is achievable if building close to or over existing main sewer. Alternatively owner to arrange
   for cctv survey to be carried out by professional camera engineers

Section notes:

Dormer height not to exceed existing ridge.

Ensure that the dormer is set back a minimum of 200mm from the original eaves in accordance with permitted development for householders technical guidance updated version April 2014.

All new timber connections to be bolted with 10mm ms bolts and dog tooth connectors.

Remove existing binders. Provide solid noggings between new floor joists and instal Jiffy hangers in position of original binders.

Instal 150x50mm sw struts in wall to support cut end of existing purlin.

Remove existing hip end rafters and extend and splice existing ridgeboard through. Instal new 50x125mm sw treated rafters every 400mm ctrs supported via new load bearing ashlar wall.

Apply double rafters eitherside to dormer cheeks.

Where clear span of existing front pitched rafters exceed 2700mm: New 50x125mm C24 grade rafters to be bolted to existing rafters to provide support to existing front pitched rafters bearing onto new load bearing ashlar wall.

Provide double trimmers and preformed lead cover flashing around new pitched skylight roof windows (Velux or equivalent).

Strip back and refix roof coverings with new EPDM membrane (dressed under tiles min 600mm) and sw treated battens as necessary, dress flat roof membrane over plywood and tiling fillet (150mm min above flat roof) to provide water proof junction.

Insulation to rafters where re-roofing is not intended i.e existing front rafters: Provide battens fixed in line under existing rafters to increase minimum rafter depth to 125mm. 75mm Kingspan Kooltherm K107 Pitched Roof Board partially filling space between rafters maintaining a minimum 50mm ventilated airspace above insulation. 72.5mm Kingspan Kooltherm K118 Insulated Plasterboard fixed under rafters 3mm skim coated. Achieves U value of 0.15W/m²K.

Insulation to new rafters or where re-roofing is intended with installation of new breathable membrane based on minimum rafter depth of 125mm: Tiles to match existing on battens and 38x38mm counter battens on Kingspan nilvent breathable membrane. Kingspan Kooltherm K107 Pitched Roof Board fully filling space between rafters. 3mm skim coated 57.5mm Kingspan Kooltherm K118 Insulated Plasterboard fixed under rafters. Achieves U value of 0.15W/m²K.

Dormer flat roof: EPDM fully adhered roofing system by approved installer in accordance with BS EN 13707 on 18mm roofing grade ply on sw firrings laid to fall 1:80 minimum on 50x175mm sw treated flat roof joists every 400mm ctrs bolted to existing rafters and seated into web of new ridge beam. 140mm Kingspan Kooltherm K107 Pitched Roof Board partially filling space between joists maintaining a minimum 50mm ventilated airspace above insulation. 37.5mm Kingspan Kooltherm K118 insulated Plasterboard fixed under joists. 3mm skim coated. Provide Herring bone strutting at 1/3rd and 2/3rd ctrs. Achieves U value of 0.15W/m²K.

30x5mm ms strapping all around every 1800mm ctrs to provide lateral restraint at junction of wall, joists and rafters.

50mm welted drip on galvanized plate to centre line of gutter fixed to 50mm deep timber nosing piece.

100mm black upvc gutter on anthracite colour upvc fascia board. 25mm Glidvale soffit vent strip all around to maintain cross ventilation. 25mm Clear ventilation gap with insect mesh.

2no 50x200mm sw beams bolted together bearing onto 100x100mm sw posts over new dormer windows.

2no 50x200mm sw beams bolted together bridged over existing window lintels.

New windows to be double glazed Low E glass with a 23mm Argon gas injected cavity to achieve a U value of 1.6W/m²K. Provide toughened safety glass in accordance with BS 6206 to glazing in critical areas i.e new French door set and glazing below 800mm from floor level. Provide trickle vents to head of each new upvc frame to provide a continuous air flow of 8000mm².

Upgrading existing external / party walls to loft room to achieve refurbishment U value of 0.30W/m²K: Apply DPC strip (if there is a risk of moisture penetration). Fix 25x47mm sw battens every 600mm ctrs to existing masonry wall. Install Kingspan Kooltherm K118 Insulated Plasterboard 3mm skim coated. Thickness of board dependant on existing wall construction. Typically 42.5mm for lightweight rendered solid blockwork and 57.5mm for solid brick, dense blockwork and cavity walls.

Upgrading of existing solid masonry walls within loft room with new timber studwork: 50x100mm sw treated studs every 400mm ctrs on head and sole plate and fixed vertically to existing walls with mechanical fixings. (with a strip of damp proof course between stud & wall if there is a risk of moisture penetration). Fully fill timber studs with 100mm Kingspan Kooltherm K107 Pitched Roof Board between timber studs. Gyproc vapour check plasterboard 3mm skim coated. Achieves U value of 0.30W/m²K Refurbishment.

Dormer walls: Plain tile hanging smooth grey on battens and Kingspan nilvent breathable membrane on 9mm OSB on sw treated studs 50x100mm every 400mm ctrs. 100mm Kingspan Kooltherm K107 Pitched Roof Board between timber studs. 37.5mm Kingspan Kooltherm K118 Insulated Plasterboard 3mm skim coated. Achieves U value of 0.18W/m²K.

Internal walls: New stud partition walls to be 50x100mm sw treated studs every 400mm ctrs on double joists/noggings or sw soleplate.
Instal 100mm Rockwool 23kg/m³ density sound insulation to wall void 12.5mm wallboard and plaster skim eitherside.

NEW INTERNAL LOAD BEARING WALLS (LBW): 100mm Thermalite Aircrete Hi-Strength 7 (7.3 N/mm²) blockwork on exg / new foundation. 12.5mm Gyproc wallboard and plaster skim finish to both faces.

Loft ashlar / load bearing dwarf walls: 3mm skim coated 37.5mm Kingspan Kooltherm K118 Insulated Plasterboard on 50x100mm sw treated studwork with 100mm Kingspan Kooltherm K107 Pitched Roof Board between timber studs. Achieves U value of 0.18W/m²K.

Ceiling to eaves storage / behind ashlar walls: If the roof is not insulated at rafter level after partition walls the insulation at the existing ceiling level will require upgrading to 270mm Knauf earthwool loft roll insulation. Installed with 100mm inserted between the ceiling joists and 170mm laid at right angles over the ceiling joists. Alternatively use 100mm Kingspan Kooltherm K107 Pitched Roof Board fully filled between timber joists and 100mm K107 Board laid over the joists. Ensure insulation is continuous with ashlar / dwarf wall to avoid thermal bridging. Achieves U value of 0.15W/m²K.

Instal code 5 lead cover flashing to underside of windows and all around new dormer with code 4 lead soakers.

Novia 500g Polythene VCL, CE approved to EN13984 to be installed to inside face of timber partitions to new 'wet rooms' i.e bathrooms, wc's, utilities etc.

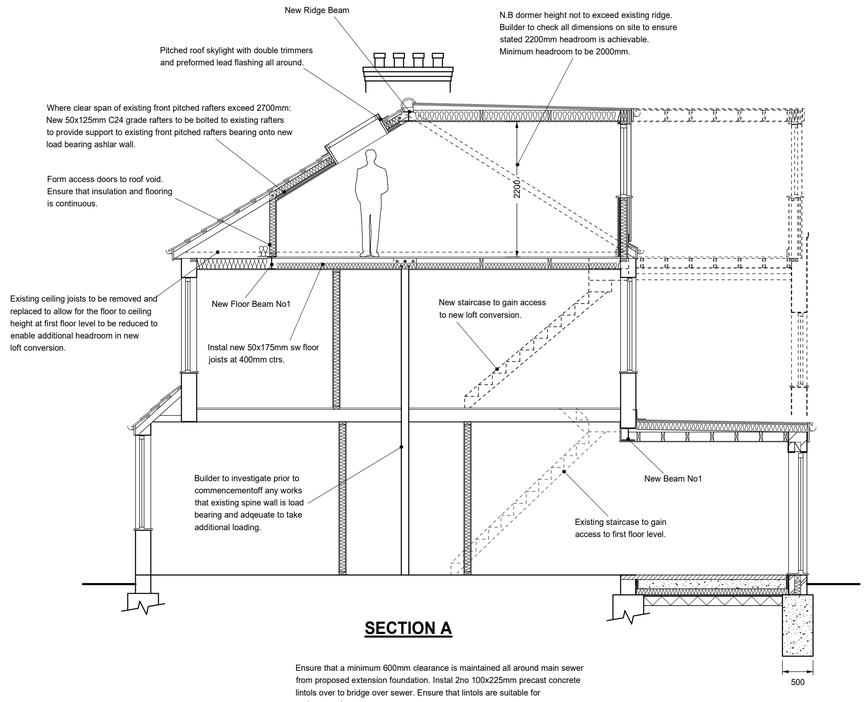
50x100mm sw wallplates bedded on sand and cement / mechanically fixed to wall.

New floor joists note: 22mm tongued and grooved flooring grade moisture resistant chipboard (grade 2/3 in bathroom) on sw treated floor joists 50x175mm minimum C24 grade every 400mm ctrs seated into web of new floor beam and bolted to existing rafters installed above existing joists. Alternatively if spine wall is deemed to be load bearing slot between existing joists and split span via existing load bearing spine wall. Solid strutting at 1/3rd and 2/3rd ctrs. Solid noggings at ends to prevent movement. Joist ends supported on Simpson JHA Strong Ties fully nailed to full depth timber blocking bolted through web of new steel in accordance with the recommendations. Instal 100mm Mineral wool 10kg/m³ density suspended on chicken wire fixed to underside of new joists. Existing ceilings of lathe and plaster to be sound condition to achieve modified half hour fire resistance. Continue flooring and Rockwool to roof void.

Stair Notes:
Taper tread winders to comply with Building Regulations
Minimum going to be 225mm and 75mm around newell posts
Maximum rise to be 225mm
Maximum distance between balustrading to 100mm
Minimum handrail height 900mm and 1100mm at landing levels
2000mm minimum headroom with minimum clearance of 1900mm taken from a 45 degree angle from stair nosing

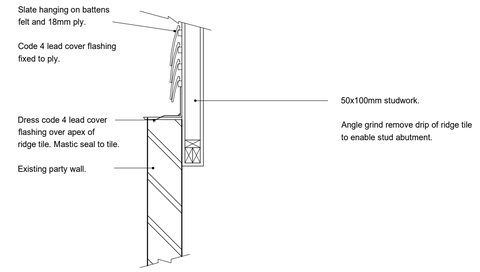
Specialist stair fabricator to determine design of staircase from site dimensions.

N.B. All dimensions for new stair to be taken strictly on site prior to fabrication and installation. Staircase to show compliance with Part K1 and K2 Protection against falling.



SECTION A

Ensure that a minimum 600mm clearance is maintained all around main sewer from proposed extension foundation. Instal 2no 100x225mm precast concrete lintols over to bridge over sewer. Ensure that lintols are suitable for underground use.



PARTY WALL FLASHING DETAIL SCALE: 1:20

Single storey extension section notes:

Instal code 4 lead cover flashing at abutment of wall and new flat roof. Bitumen felt cavity tray if existing wall is cavity. Minimum 150mm downstand between wall and flat roof.

New extension warm flat roof: EPDM fully adhered roofing system by approved installer in accordance with BS EN 13707 on 18mm roofing grade ply on 150mm Kingspan Thermaroof TR27insulation on polythene 1000 gauge VCL on 18mm roofing grade ply on sw firrings laid to fall 1:60 minimum on sw treated joists 50x150mm C24 Grade every 400mm ctrs on joist hangers fully nailed to full depth fixed to 50x225mm wallplate bolted to existing wall at 900mm ctrs / bolted to new rafters. Provide Herring bone strutting at 1/3rd and 2/3rd ctrs. Achieves U value of 0.15W/m²K.

50x100mm sw collars bolted every 3rd rafter.

30x5mm ms strapping every 1800mm ctrs all around to provide lateral restraint at junction of wall, joists and rafters.

Instal new flat roof skylights with double trimmers and preformed lead cover flashing dressed all around.

Catnic insulated lintels over new window and door openings.

50x100mm sw wallplate bedded on sand and cement / mechanically fixed to wall.

Form new render stop bell drip to provide a stop to the render above reveals to produce a straight edge, provide protection against impact and deflect rain water.

New windows to be double glazed Low E glass with a 23mm Argon gas injected cavity to achieve a U value of 1.4W/m²K. Provide toughened safety glass in accordance with BS 6206 to glazing in critical areas i.e bi-folding door set and glazing below 800mm from floor level. Provide trickle vents to head of each new upvc frame to provide a continuous air flow of 8000mm².

EXTENSION WALL CONSTRUCTION: White self colour (to match existing) silicone based render (K Rend or equivalent) on 100mm Thermalite Aircrete Turbo blockwork with a 100mm cavity fully filled (10mm residual cavity) with Kingspan Kooltherm K106 Cavity Board abutting 100mm Thermalite Aircrete Turbo blockwork. Spot and dab 12.5mm Gyproc wallboard and plaster skim finish. Thermabate cavity closers to all reveals. Achieves a U value of 0.18W/m²K. Stainless steel wall ties every 450x900mm ctrs.

Ground floor construction: Floor finish to clients instruction on 75mm sand and cement screed finish with wire reinforcement mesh on 1000 gauge polythene separation layer on 100mm Kooltherm K103 insulation with slabs lapped up minimum 150mm around perimeter on 150mm C35 sulphide resistant ground bearing slab with A252 mesh in top and bottom of slab on Bituthene 4000 damp proof membrane on sand blinded well consolidated hardcore. Achieves a U value of 0.18W/m²K.

To ensure DPC is not bridged provide new render stop bell drip to provide a stop to the render above damp proof course produce a straight edge, provide protection against impact and deflect rain water.

Bitumen felt damp proof course minimum 150mm above ground level. Excavate ground levels to suit.

Ensure that semi-engineering brickwork is used below DPC level.

75x225mm airbricks all around every 1800mm ctrs to provide sub floor ventilation to new and existing floor, if timber via 100mm upvc ducts. Vent through oversite.

Foundation depth to suit soil condition and to Building Inspector's approval. Allow a depth of 1000mm for quotation purposes. The foundations should be taken down to a minimum depth of 1m below ground level if in a clay subsoil and a minimum 150mm below any drainage within 3m which ever is the deeper. Where localised trees are within the zone of influence the foundation depth will be required in accordance with "LABC foundation calculator" requirements.

Encase all drains under building in 100mm peashingle (20mm). Precast concrete lintels to be provided where drains pass through walls.

SECTION SHEET

64 CARMICHAEL ROAD, SOUTH NORWOOD, SE25 5LX
SHEET SIZE: A1
SCALE: 1:50 (SECTION)
CLIENT:
JOB NUMBER: 4543 **DATE: APRIL 2023**
DRAWN: R. RICHARDSON

REVISIONS:

REV.

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