Gannon Works

53 Grange Avenue
Building Regulation Notes
Construction Issue

August 2025

Substructure

Foundations to SE specification

Superstructure

Superstructure to SE specification including any starter bars, straps, steels and restraints.

DPC

Visqueen Ultimate Gas Barrier NF-500 To be utilised within slab build up any variation should be agreed with architect and datatsheets provided to submit to council and building control

2000 gauge polythene DPC at 150mm above external ground level to BS 743. Cavity trays to all openings with suitable low profile stop ends to allow moisture escape. Open perpend joints to be provided below DPC level at 450c/c to allow for moisture escape.

Flashings

To roofing and glazing suppliers recommendations

FLOORS

BUILD UP 1A

Ground Floor Construction to achieve min 0.11Wm2K

- 25mm oversite concrete
- 150mm void
- Suspended concrete block and beam slab to SE specification
- **Visqueen Ultimate Gas Barrier NF-500** Lapped up to DPC level
- 150mm Kingspan Kooltherm K103 floorboard PIR insulation
- Separation layer
- 75mm screed Floor finishes (20mm allowance for engineered timber finish as per finishes drawings)
- 25mm of Kingspan TF70 to all perimeters for perimeter insulation

Void ventilated using ducting to air bricks where shown on drawing (side elevations only)

BUILD UP 1B

External Patio
- 25mm oversite concrete

• 150mm void
• Suspended concrete block and beam slab to SE specification
• **Visqueen Gas Barrier Membrane 2m x 50m RS074397** Lapped up to DPC level
• 150mm Kingspan Kooltherm K103 floorboard PIR insulation
• Separation layer
• 75mm screed Floor finishes (20mm allowance for quarry tile finish as per finishes drawings)
• 25mm of Kingspan TF70 to all perimeters for perimeter insulation

Void ventilated using ducting to air bricks where shown on drawing (side elevations only)

BUILD 1C

External Patios

• 100mm compacted gravel
• 75mm external screed waterproof as required
• 20mm allowance for porcelain tiles as per site plan

WALLS

BUILDUP 2A

Extension Walls, Timber Frame with Clay Render Finish

• Luna plaster, Clay Plaster, Finish - Smooth / Natural, Colour - Feather 01
• KOOLTHERM K118 37.5mm Insulated plasterboard (12.5mm plasterboard internal finish)
•Vapour Control Layer
• Timber Studs to Structural Engineers Design with KOOLTHERM K112 - (BETWEEN TIMBERS)
• Minimum 40mm residual cavity between insulation and sheathing board toKingspan recommendations
•18mm Marine grade ply sheathing board
•KINGSPAN NILVENT BREATHABLE MEMBRANE
• 50mm treated battens for ventilation and drainage, installed vertically
• Render carrier board
• Clayworks clay plaster finish, colour Red 02, finish External Rustic

ROOFS

BUILDUP 3A - Exposed Rafters (Extension) to achieve min Uvalue of 0.15Wm2K

Main Flat pitched roof Construction to achieve U-Value of min 0.15Wm2K

- Standing Seam VM zinc, colour Pigmento Brown
- Membrane by VM Zinc
- 150mm Kingspan Thermaroof TR27 PIR insulation with fixing through to VM Zinc recommendations
- Vapour control layer
- 18mm Marine grade plywood
- Exposed flat roof Joists to Structural Engineers Design and specification - Finish to be agreed with client and architect
- 12.5mm plasterboard mechanically fixed to underside of ply deck
- Luna plaster, Clay Plaster, Finish - Smooth / Natural, Colour - Feather 01

Windows and Doors

Aluminum framed windows to achieve minimum U-Value of 1.4W/m2K. All finished in RAL as specified on drawings

Window openings to be as per drawings to achieve required levels of purge ventilation, background ventilators to also be provided in accordance with approved document F. For a hinged, sliding or pivot window that opens 30°or more, the area of the opening part should be min 1/20th of the floor area of any habitable room. Casement/tilt and turn windows on first floor, with cill height below 800mm, to be fitted with child-safe removable opening restrictors to limit opening to 100mm.

All glazing to be double glazed, and toughened/laminated in critical locations (within doors/side screens/glazing less than 800mm from finished floor level).

Wall cavities around windows and doors to be closed as per details.

At least one first floor window per room should be suitable for egress in case of an emergency by having an unobstructed openable area that is at least 0.33m2 and at least 450mm high and 450mm wide, with a cill not more than 1100mm above floor level.

LINTELS

Internal lintels to SE design and specification.

Proprietary cavity trays to be used at head with perpend weepholes (above lintels) and formed at vertical dpc positions and jambs where appropriate.

Rooflights

1200x800mm Top Hung Luxlite pitched rooflights to be installed flush with external face of standing seam zinc. Installed with black out blinds as per details.

Standard Internal Doors

N/A

Drainage

Design of underground drainage to structural engineer's design, positions of above ground pipes and stacks illustrated on drawings. Final route of above ground drainage to plumber's design and specification.

All drainage to be fitted in accordance with approved document H (2010 Edition). Drains below building to have 100mm granular surround. Concrete lintels to be provided over all drains which penetrate any wall, with 50mm space around pipe masked both sides with rigid sheet material.

Inspection chambers to be either 225mm or 450mm diameter depending on invert level. Manholes to be backdrop type when change in level is evident.

New rainwater and soil pipe positions including sizes are shown on plans, back inlet trap gulleys (BITG) to be used to all RWP positions.

Waste pipes to be in PVC 32mm diameter to wash hand basins and 40mm to baths, sinks and showers and fitted with 75mm seal traps. Where branch connections exceed 1700mm in length for 32mm pipes and 3000mm in length for 40mm pipes anti-syphon traps with 75mm seal depths to be fitted.

Single stack plumbing to comply with BS 5572. SVP's to be 100mm diameter uPVC and terminate min 900mm above any building opening within 3 metres. When SVP passes through roof appropriate propriety slate sleeve to be used. Access to be provided to all runs of system by way of rodding eyes or removable traps.

SVP's to discharge directly into chambers using 100mm diameter rest bend.

Space Heating

Heating system to specialist subcontractors design and specification and installed in accordance with approved document J and L1B. Ground floor to be heated via underfloor heating (TBC Client).

Hot/Cold Water

All new hot water/storage systems to be specified by specialist engineer and with controls to be installed in accordance with approved document L1B 2021.

Power/Lighting/Communications

All positions and amount of M&E to M&E intent drawings. All electrical installations to be installed by a qualified installer to satisfy building control.

Energy efficient lighting to be provided in accordance with approved document L1B and Section 12 of “domestic building service compliance guide 2021”.

All switches and sockets need to be positioned such that they are easily reachable within 450-1200mm from finished floor level in accordance with approved document M.

Ventilation

The following extract ventilation rates are required in accordance with approved document F. In the kitchen a ventilation rate of 60l/s is required generally with a reduced rate of 30l/s required over a cooker hood. In a bathroom a rate of 15l/s is required whilst a rate of 30l/s is required in the utility room/cloak room. For the downstairs WC/cloakroom a rate of 6l/s is required.

Ventilation as below, supplied by Fresh Air Supplies:

TD-SILENT Series – Ultra-Quiet Inline Mixed Flow Duct Fan (S&P), model: TD 250/100 Silent

Fed by 2x Ergovent RONDO Invisible Ceiling Air Valve Diffuser

Fire Safety

Heat detectors to be installed in kitchen area with smoke detectors in the main living space in accordance with approved document B. Additional smoke detectors to be ceiling mounted throughout house, within circulation spaces min 7.5m from each habitable room and at least one per floor. All smoke/heat detectors to be mains wired interlinked with battery back-up.

Accessibility

In accordance with approved document M, all main access doors are to have a clear opening width of min. 775mm, whilst internal doors are to have a minimum clear opening width of 750mm. All circulation routes have a width of no less than 1m.

SAP

SAP calculations as per Manchester EPC as designed specification.

Water Efficiency

In accordance with approved document L1B 2021.

Secure by Design/Part Q

Doors and windows specification as per items 4.1 to 4.3 of Secure by Design Checklist.
Alarms to be installed as per item 4.4 of Secure by Design Checklist.
External features including boundaries and lighting as per section g of checklist.