

# Proposed First Floor Level Extension at 40 High Street, Kingsley, Staffs ST10 2AE

## Demolition

Take down and remove from site the existing entrance porch at the side of the house and remove all resultant rubble from site, fill/seal with concrete the ends of any redundant drains.

If required, remove the section of garden wall adjacent to the proposed extension and re-instate once the extension has been completed.

## Site preparation

Remove all topsoil from below the proposed extensions' 'footprint'. Remove all spoil from site.

## Foundations

The new section of foundation is to be minimum 450mm wide concrete trench filled foundations, on to natural undisturbed ground, to be at least 900mm deep, to the satisfaction of the Building Control Surveyor.

Where drains pass through the foundations, shutter off the concrete and provide a concrete lintel over, seal all remaining gaps with lean mix concrete to prevent access by vermin.

The existing foundations are to be exposed and checked for adequacy, prior to commencing the work.

## Below Ground Drainage

Remove the existing drains in the vicinity of the extension and replace with new UPVC drains laid on and surrounded with a 150mm bed and surround of pea gravel, vent the drain to the external air.

Provide an air admittance valve to the stub stack in the WC compartment, the WC is proposed to be a combined WC/WHB type whereby the basin sits on top of the WC.

The ground level at the side and rear of the house is significantly higher than that around the house, hence the storm water is to be re-connected in to the existing combined drains via trapped gullies. Black UPVC 100mm gutters and 63mm downpipes.

The drains at the rear of the site serve only number 40 High Street, hence they are not classed as a public sewer.

## Ground floor

100mm concrete on 500 gauge vapour control membrane on 100mm PIR insulation with a 25mm perimeter insulation upstand on a 1200 gauge membrane on 150mm compacted sand blinded MOT Limestone chippings.

## External walls

7N solid concrete blocks to be used below ground level, or suitable trench blocks.

Provide a 2000 gauge DPC at the same level as the floor slab dressed in to the existing DPC and a further DPC 150mm above ground level.

Up to DPC level use a conservation type red facing brick, above the damp course/splash, use rendered solid concrete blocks externally, 50mm cavity wall insulation (or as much as the existing cavity width will allow), 100mm lightweight thermal blockwork to inner leaf and 42.5mm thick 'Kinspan Kooltherm' or equivalent insulation backed plasterboard + skim.

Insulated cavity closures are to be used at the new door & window reveals.

Wall ties at 450mm centres vertically, 750mm centres horizontally and every block course around window/door openings.

### Internal walls

The new internal walls are to be constructed from 75mm timber studs, lined each side with 12.5mm water resistant plasterboard (green in colour).

### Steel beams

If running the drains for the extension within the first floor void, provide a 152 x 152 steel beam to trim the joists with a timber bearer bolted in to its web, running from front to rear.

Provide a 203 x 102mm steel ridge beam with a 100 x 50 timber bearer bolted on to the top of it.

### Lintels

Provide 'Catnic' or equivalent lintels over the new door and window openings, 150 x 100mm concrete lintels where forming the new window opening (with a cavity tray over).

### Roof structure

Plain clay roof tiles to match existing fixed to tandalised roofing battens on a BBA approved breathable roofing felt.

175 x 50mm rafters at 600mm centres fixed at high level to the steel ridge beam/timber bearer and at the lower level to a 100 x 50mm wall plate. Provide 100 x 50 ceiling joists for the flat part of the ceiling.

150mm PIR insulation in between the rafters running from wall plate level to ridge. Seal all gaps between the insulation and the rafters with foam gap filler.

15.0mm plasterboard and skim to the ceilings.

### External doors and windows

The new windows are to be UPVC to match existing with a 16mm air gap and low 'E' glass, Argon filled, to achieve a 'U' value 1.6 W/m<sup>2</sup>K or better.

The new rear elevation door is to be a 'secure by design' UPVC composite door, 1.4 Wm<sup>2</sup>K 'U' value, safety glass to BS6206 is to be provided within the door.

Provide trickle vents capable of providing the equivalent of 8000mm<sup>2</sup> of background ventilation within both new windows.

### Heating system

The existing wet central heating system is to be extended in to the new bathroom area.

### Joinery

The first floor structure is to comprise of 150mm x 50mm floor joists with a central row or strutting. If the drains are to run within the floor void, trim the joists on to a 152 x 152mm steel beam.

Use 21mm chipboard flooring, 100mm mineral wool insulation quilt between the floor joists and 12.5mm plasterboard and skim to the ceiling.

New internal doors to clients' choice, skirting and architraves to be provided, to match existing.

### Services

There is no mains gas supply to the house, the incoming electric and water is thought to run at the front of the house; locate prior to commencing the foundation excavations.

### Electrical installation

The new electrical installation is to be in accordance with current IEEC regulations and NICEIC recommendation reference minimum number/position of sockets, switches, light fittings etc. (and to be agreed with Client).

Provide a mechanical air extraction fan within the kitchen, capable of extracting at least 30 litres per second and one within both the WC compartment and the new bathroom (both being capable of three air changes an hour and with a fifteen minute overrun facility).

Provide a new system of mains wired interconnected smoke detection with battery back-up comprising of:-

- A heat detector/sounder within the new kitchen.
- A smoke detector/sounder within the proposed dining area and within the first floor level landing area.
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All electrical work is to meet the requirements of Part 'P'.

#### Decoration

Decoration of woodwork, walls and ceilings is to be excluded from the contact price, unless requested by the client (this element should be itemised separately).

#### General

This specification and accompanying drawings have been prepared for local authority planning and building regulation purposes.

The Client and the builder will have health & safety responsibilities under the 2015 CDM regulations. No specific hazards have been identified in addition to those associated with typical building work.