

43 Fitzalan Road, Arundel, West Sussex, BN18 9JP

Flood Resilient Construction:

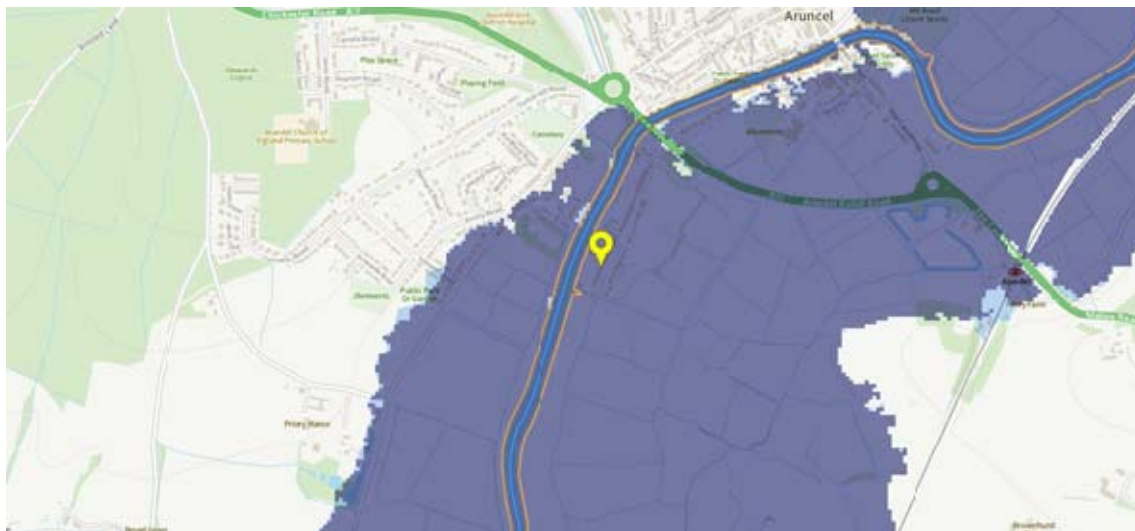


Figure: 01 EA Flood Map Extract

The site lies with Flood Zone 3

Generally

The construction of the new summer house will generally be carried out in accordance with the recommendations contained in CLG Improving the Flood Performance of New Buildings 2007.

The new structure will be ancillary to the existing house and will not provide new habitable accommodation.

There will be no sleeping accommodation, sanitary accommodation or cooking facilities.

The new finished floor level will be constructed 450mm above finished ground level, approximately according with the finished floor level of the main house.

It is proposed that the intended construction will prevent entry of water up to finished floor level; however, above that level water will enter via doors and other openings.

Construction above finished floor level will be designed to dry out as quickly as possible with minimal replacement of the fabric required.

Foundations:

Foundations shall be designed and constructed in strict accordance with the recommendations of the Structural Engineers.

It is anticipated that the foundations shall be of concrete strip formation; the precise design and detail of the foundations shall suit the conditions encountered on site and to the approval of the Local Authority.

Sub-Structure:

Substructure cavity walls to be built from foundation to dpc level.

Substructure walls shall be constructed with a single leaf of 215mm dense concrete blocks with a strength of 7.0N/mm² to BS 6079 laid in 1:3 cement mortar. The wall shall change to 215mm thick facing bricks a minimum of two courses below finished ground level so that only face brickwork will be visible upon completion.

External dpc shall be a minimum of 150mm above finished ground level, stepped as necessary. The timber frame sole plate will be placed on an additional dpc at higher level.

Suspended Ground Floor:

The new finished ground floor level shall be formed 450mm above finished ground level comprising 25mm tongued and grooved timber floor boards; on 1200 gauge polythene vapour control membrane; on timber floor joists placed upon a dpc and spanning between masonry walls.

The Summer House will not be heated, however insulation will be incorporated to provide a degree of comfort, comprising a rigid closed cell insulation board, with joints tightly butted to prevent cold bridging, tightly packed between joists, supported on battens applied to the side of the floor joists or alternatively laid on a net applied to the underside of the joists.

A minimum 450mm drained void shall be provided beneath the suspended floor, ventilated via cranked telescopic ventilator units inserted in all exposed wall faces at circa 1500mm centres, to provide adequate cross flow in accordance with the requirements of the Building Regulations Approved Document.

External Walls:

The external wall above brick plinth level shall be of a timber frame to specialist design and manufacture; comprising min 140 x 50mm treated softwood studs at 600mm centres; faced externally with 12.5mm WBP plywood sheathing board and faced with breather membrane; 38 x 25mm vertical treated softwood battens and horizontal feather edged boarding.

The system shall be complete with all sole plates, wall plates, anchors, straps etc as necessary for the proper execution of the works.

Full details of the system shall be prepared and provided by the specialist fabricators.

The installation shall be carried out on site in strict accordance with the recommendations of the fabricators.

A rigid closed cell insulation board shall be tightly fitted between the studs to provide a degree of thermal resistance and comfort in the unheated area.

The wall shall be finished internally with a 1200 gauge polythene vapour control membrane taped and sealed to all adjoining surfaces to maintain an airtight seal; and 1 No layer of 12.5mm moisture resistant Gypsum Wallboard with skim finish.

All penetrations of the vapour control membrane shall be sealed.

Damp Proof Course:

Damp proof courses shall be continuous to BS 743 with min. 150mm end laps and shall be provided to all external walls. DPC's to the outer skin of external walls shall be positioned min. 150mm above adjacent finished ground level.

Vertical DPC's shall be provided at all reveals in external walls.

Drainage:

No foul drainage will be required.

Surface water drainage shall be via PVCu gutters and downpipes connected into a new underground drainage system feeding into a new cellular crate soakaway located within the large garden of the property.

The soakaway will be designed by specialists based upon percolation tests carried out in accordance with the requirements of BRE 365.

Fittings and Fixtures:

All furniture within the summer house will be moveable.

Sockets and other electrical fittings, including spurs, switches etc, shall be positioned as high as possible but within the requirements of the Building Regulation approved documents.

External Hard Paving:

External hard paving will be permeable.