

Three conservation style roof lights are to be installed within the new roof structure, two of which will be in the master bedroom whilst the third will be over the ensuite. There is a condition attached to the planning approval which requests that the builder provides details of the roof lights to the council prior to installation. The council seem to have a preference at the moment for conservation style roof lights made by the conservation roof light company. The rafters should be trimmed according to the manufacturers guidelines.

Ridge height of the new roof is to run into the level of the existing ridge on the main house.

Where the ceiling follows the rafters, there is to be 90mm rigid foam insulation fitted between the rafters with a further 50mm rigid foam insulation fitted below the rafters.

The roof structure over the extension is to be constructed using 50 x 150mm C16 grade treated softwood rafters set at 450mm centres with treated softwood battens above one layer of tyvek permeable roofing felt. The roof is to be finished using clay tiles to match those on the existing roof. Suitable ridge tiles to be used, to match those on the existing house.

The structural engineer will need to look at the proposed roof structure over the first floor. I have shown a steel ridge purlin which will sit on a steel box frame which is set in the gable wall.

New glazed gable screen to be constructed using powder coated aluminium.

I have shown a steel box section to provide support over the end gable screen. The intention is for this steel to be encased within the roof structure.

Glass balustrade to be fixed outside WF9.

The rafters are to terminate in a boxed eaves detail which should match the existing boxed eaves detail on the existing house.

There is to be either two layers of 47mm acoustic slab or 100mm glass fibre quilt laid within the floor void between the joists.

22mm floor finish to the first floor and 18mm plasterboard and skim ceiling finish below.

New first floor construction to run flush with the existing floor levels within the existing house. Floor joists to be 50 x 150mm C16 treated softwood joists set at 450mm centres.

The external walls of the new work is to have an inner skin of suitable 100mm blockwork, with an outer skin of suitable brickwork, with 50mm cellotex rigid foam insulation set within the 100mm cavity between.

Catnic BW4/225 or similar cavity ties to be spaced at 450mm vertical and 750mm horizontal spacings to give a density of 2.47 ties per square metre.

Dpm to be set at minimum 150mm above external ground level.

The wall is to be built up to just below ground level in two skins of 100mm blockwork. The cavity is to be filled up to 225mm below the level of the dpc.

The new work is to be constructed above a 600 x 200mm mass concrete strip footing which is to be set at a minimum depth of 1000mm (to building control approval).

Allow for the use of a 25mm rigid foam edging strip to the perimeter of the floor slab.

New guttering to match the profile used on the existing house, unless the clients specify that all of the existing guttering is to be renewed.

Refer to structural engineers drawings if required for confirmation of all lintels and for information about bearings.

All new work is to be carried out in accordance with the 'Robust Construction details'.

18mm hardwood cills to be fitted to new windows.

Sockets and switches are to be located between 450 and 1200mm above finished floor level.

Suitable lead flashing to be used at the junction of the bay roof with the external masonry wall. Lead flashing to be laid in accordance with LSA guidelines.

The lean to roof over the bay in RG1 is to be constructed using 50 x 100mm C16 grade treated softwood rafters set at 450mm centres. The rafters should be fixed to a plate which is securely fixed to the new masonry wall. The roof finish should consist of treated softwood battens above one layer of tyvek permeable roofing felt. The roof is to be finished using clay tiles to match those on the existing roof. A brick dentilled eaves detail is proposed at the eaves of the bay.

The 50 x 100mm ceiling joists which form the ceiling within the bay are to have 100mm glass fibre quilt laid between the joists with a further 170mm glass fibre quilt laid across the top.

WG1 - create new window opening within the new work using a catnic CG90/100 or similar lintel above

The masonry to the external wall at first floor level is to be carried on a pair of steel beams. A Structural Engineer will need to provide calculations and specifications for this.

All steel beams to be encased in two layers of 12.5mm plasterboard to provide half an hours fire resistance.

A skirting board is to be fitted throughout the new work and the material and profile of this should be confirmed with the client.

Ground floor construction to consist of a suitable floor finish which is to be agreed with the client, above 100mm concrete slab above 90mm rigid foam insulation above a 'Visqueen Super' dpm, above 150mm sand blinded hardcore.

The builder is to confirm with Building Control whether a basic radon barrier is required prior to commencement.

WG7 - create new window opening within the new work using a catnic CG90/100 or similar lintel above

New windows are to have a U value of 1.6. These are to consist of 2 layers of 4mm glass with a 16mm argon filled gap between, with a soft low E coating.

New windows to be set back 40mm from the outer face of the wall and the windows are to have projecting cills.

The new first floor structure within RG1 is to have an oak beam set at mid span. The size of this oak beam will need to be calculated by the structural engineer but should be in the region of 250 x 250mm. The type of oak should be carefully shown to reduce shrinkage. This information should be shared with the clients so that they are aware of the difference between green oak / kiln dried and air dried oak.

