BUILDING DESIGN SOLUTIONS NORTH EAST LIMITED

SPECIFICATION

6 Sunnyside Lane

Cleadon

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Specification

Foundations.

The foundations of the proposed extension are to be down a minimum of 900mm below ground level. The size of the existing foundations of the conservatory are to be exposed to determine their suitability and if found to be inadequate the founadtions are to be removed and renewed. The foundations are to be 600mm * 200mm. All foundations are to be in accordance with B.S. 8004. All excavations are to be designed in accordance with the LABC guidance for Building Near trees. . The minimum scarsement is to be 150mm from the finished brickwork. All foundations must be bearing on to firm clay strata. All excavations are to be stepped below drains if found to be penetrating the foundation run. RC lintels to be provided where this occurs. No trees are considered to affect the design of the foundations.

Walls.

The walls of the extension are to be constructed of 102mm facing brickwork to match the existing with 100mm cavity with 100mm Medium density blockwork internally then plasterboard dot and dabbed with a 3mm finishing skim. The cavity is to be fully filled with knauf drytherm 32 ultimate insulation to achieve a U value of 0.27 W/m^2K. Stainless steel wall ties are to be used to B.S. 1243 placed at staggered intervals of 750mm horizontals, 450mm verticals and every 300mm around windows and doors. All windows and doors are to be provided with vertical insulated D.P.C.'s and all new cavities are to be continuous with the existing construction. DPC's are to be placed a minimum of 150mm above ground level. Fine weak mix concrete to be provided in the cavity if deemed necessary. This is to terminate a minimum of 225mm below DPC level. The stud walls between the games room and kitchen and the store and the kitchen are to be constructed of 100mm x 50mm timber with 12.5mm plasterboard either side. 25mm sound insulation to be placed between the studs. 3mm plaster skim to be provided ready for decoration.

Ground Floor.

The existing floor of the conservatory is to be removed in preparation for the new floor to be constructed.The floor of the extension is to be made up of 125mm concrete through with the existing. 75mm kingspan insulation or similar is to be laid on the DPM with 25mm jablite insulation to the perimeter

of the floor. Visqueen DPM is to be placed on a 30mm sharp sand blinding aid on the sub base dolomite or similar. The DPM is to be lapped with the DPC.. The sub base is to be compacted in layers of 150mm. No existing ventilation is present under the floor.

Drainage.

The new pipework is to be hepworth supersleeve and is to be bedded on 10mm pea gravel. The new drainage is to be laid to a minimum gradient of 1:40. The new rainwater collection pipe to the right side of the extension is to be connected to the original lead and inspection chamber. The new gully at the front is to be trapped and roddable type. 125mm half round gutters are also to be provided and connected to downcomers to match the existing All redundant drainage to be grouted up where not used.

Roof.

The roof tiles over the extension are to be marley modern. 100mm headlap to be provided for each tile. To fix the tiles to the roof 50mm * 25mm tile battens are to be fixed to the rafters. Between the tile battens and the rafter the breathable tyvek membrane is to be placed. The roofs are to be made up of 150mm x50mm C16 softwood timber @ 400mm centres. 100mm x 50mm collar ties are to be provided to every rafter over the kitchen. Joists to be doubled up round the roof lights. The joists are to sit on a 100mm x 50mm wallplate. A wallplate is to be fixed to the existing side wall of the property. The fixings are to be mechanically fixed with M16 wall bolts @ 600mm centres. To insulate the extension roof 100mm extratherm insulation is to be friction fitted between the joists flush with the underside of the joists. A further 25mm extertherm insulation is to be fixed to the underside before the 12.5mm plasterboard is to be fixed and a 3mm plaster skim applied ready for decoration.. Roof to achieve a thermal U value of 0.16 W/m2K. To prevent any spread of the roof lateral restraint straps at are to be provided @ 1.8 meter centres and 1.2m centres on the gables Note that the builder is to ensure that the ceiling is well sealed. If the roof is not sealed correctly then ventilation is to be provided at the eaves. This will be via a continuous 10mm ventilation strip at eaves if deemed necessary. Guttering and downcomers to match the existing are to be provided. All the necessary cavity trays and lead flashing to be provided over the rear extension if deemed to be necessary.

Lintels.

The lintels over the bi fold door openings aqnd the opening into the kitchen are to be sized as per the clients structural engineer's calculations.

Windows and Doors.

All doors and windows will be double glazed with trickle vents installed for background ventilation of 8000mm square. Ventilation openings must be equal to at least $1/20^{th}$ of the total floor area of that room. All glazing must be pilkington K with a 16mm air gap and comply with approved document K of the Building Regulations. All glazing in critical locations is to be toughened or laminated glass. **All new glazing is to give a U value of 1.6 W/m^{2}K**. The roof lights are to be Keylite windows with centre pivot painted white internally. Code: WFCP04T.

Heating.

All heating work will be carried out by a CORGI registered Gas Safe engineer and fitted in accordance with the manufacturers instructions. The heating engineer is to check to ensure that the existing boiler is capable of accepting the additional capacity to the system. If the existing boiler cannot accept the addition then a new boiler will require fitting. The boiler is to have a SEDBUC rating of not less than 89.5 and to be provided with room thermostats and thermostatic valves to all radiators except in rooms controlled by a room thermostat. Furthermore, all pipework in unheated spaces is to be provided with insulation as required by part L of the Building Regulations. Note that the outlet of the boiler is to be provided with a wire guarding if below a height of 2 metres measured from ground level The positioning of radiators etc. are to be confirmed by the client. Note that the pipe work installations are to be agreed with the client to satisfy their needs.

General Notes.

Builder is to check all dimensions on site before the commencement of any work.

All work carried out on the boundary is to undertaken with the neighbours consent to comply with the requirements of the Party Wall Act 1996.

Any work on the boundary is to have the consent of the adjoining owners.

Access for refuse collection must be maintained.

2 No. energy efficient light fitting is to be provided in the extension

A mechanical extractor is to be provided in the kitchen capable of extracting 60 litres per second and 30 litres per second through a cooker hood ducted to external air.

All electrical work is to be carried out in accordance with the IEE Regulations and a person who is Part P registered.

It is the builder's responsibility for all the necessary health and safety on site. He will cater for the removal of all waste materials from site and also make good to the client's satisfaction any areas of the site which may have been damaged during the construction work.

All structural calculations are to be provided by the client.