

PROPOSAL.

SINGLE STOREY EXTENSION TO THE REAR.

ADDRESS OF PROPOSAL.

DARWIN HOUSE, 5 COUND PARK DRIVE, COUND,
SHROPSHIRE, SY5 6BN.

CLIENTS.

Mr & Mrs M MARSTON.

**SPECIFICATION FOR THE SINGLE STOREY EXTENSION TO THE REAR OF DARWIN
HOUSE, 5, COUND PARK DRIVE, COUND, SHROPSHIRE, SY5 6BN.**

Clients Mr & Mrs M MARSTON.

EXISTING CONSTRUCTION.

Where the new works are adjacent to the existing then the plasterwork will be stripped back and new work taken from the existing and renovated.

DEMOLITION.

Skips are to be provided to allow the removal of all waste products and materials.

FOUNDATIONS.

All the new foundations are to be to the inspecting officer's approval.

Foundations to be of a strip design type 610mm x 229mm and at a minimum depth of 1 metre.

Concrete to be 1:2:4 mix.

RAINWATER GOODS.

Form hopper head and 63mm downpipes that match the existing in colour, material and profile. Connect the new rainwater downpipes to the existing system if it can be traced. If the existing rainwater system is not of adequate quality or size to allow the new rainwater to flow into it then provide a new layout and use 100mm pipes that will fall to a soak away which must be no nearer than 5000mm from the property and 5000mm from boundary.

Percolation test is to be carried out to confirm size and suitability of required soak away system and the calculations / details and results to be submitted to the inspecting officer.

CONCRETE FLOOR.

100mm Concrete slab laid on 150mm hardcore of broken brick and stone and should be completely free of contaminants and plaster, should be delivered to site via a supplier with a quality audit process in place and compacted sufficiently to support the slab and incorporate a 1200 gauge membrane DPM on a soft sand blinding.

The insulation below the concrete is to be 100mm Celotex or the equivalent with 20mm thick between slab and wall.

A separating layer is to be installed over the floor insulation to act as a second isolation membrane.

Underfloor heating is to be installed and it will be to the clients choice as to electric or water fed.

DAMP PROOF COURSE.

New DPC is to be at finished floor level and 150mm above outside ground level.

All the ends are to be fully lapped by 150mm.

The new DPC is to be fully lapped over the existing DPC at all abutments by at least 100mm.

All reveals are to be equipped with vertical DPC's.

CAVITY WORK.

The cavity wall is to be brickwork of a 102mm facing brick outer leaf that matches the existing style, texture and colour of the property with a 100mm Cavity and an inner leaf of 100mm insulation block for example, Celcon Solar or the equivalent.

Work below ground to is to be one of the following either a semi-engineering type with the cavity filled with lean mix compo up to a minimum of 225mm from DPC level or mass fill with concrete up to 150 below damp proof course or use trench style concrete blocks.

Reinforce wall with mild steel ties at 900mm horizontal cts and at 450mm cts vertically staggered.

Wall ties should also be provided and spaced not more than 300mm apart vertically, within a distance of 225mm from the vertical edges of all openings, movement joints and roof verges.

Insulation is to be 100mm thick Knauf Earthwool DriTherm 32 or the equivalent which is to be taken right up to the reveal of all openings.

All the cavities are to be sealed with insulated preparatory closers.

All returns to be no less than 655mm from the external corner.

Where new cavity walls about the existing wall's the cavities should be taken through to the existing cavity to prevent cold bridging.

Form a stone feature 1 course above the lintel line that will be proud of the face of the brickwork by 50mm.

The same bond of brickwork is to be used as the existing property which is Flemish bond.

LINTELS.

All lintels externally are to be stone and are to match in design and size of the existing lintels. All lintels to have a minimum of 150mm bearing and be concrete.

PLASTER WORK.

12.5mm plasterboard dabbed to inner face of cavity work and skimmed over or walls to be rendered with a 25mm sand and cement render which has a waterproof additive and skimmed finish.

The ceilings are to be 12.5mm plasterboard skimmed over.

WOODWORK.

The new skirting will be planed softwood matching the existing and is to be screwed to the walls. The new architraves will be planed softwood matching the existing.

GRP FIBREGLASS OR RUBBER ROOF.

The flat roof will have furring pieces secured to the joists giving the roof a fall.

Secure 18mm exterior grade plywood to the furring pieces.

Specially made, pre-moulded edging trims, wall fillets, gully mouldings will be fixed in position.

Glass fibre / Rubber mat will be tailored to fit the whole roof area. The mat will then be impregnated with polyester resin onto the new deck to form a seamless GRP membrane. Once curing time has elapsed, usually between 1-4 hours depending on the ambient temperature, a polyester resin coloured top coat will be applied to the whole roof area.

Where the flat roof meets the brick wall, a chasing will be cut into a chosen course approximately 30mm deep. A glass fibre / rubber or lead flashing will be tailor made to fit into the chasing. The chasing will then be re-pointed with appropriate sealant.

The Joists are to be C16 grade 195mm x 47mm timbers at 400mm cts with a birds mouth cut over the wall plates.

The lateral support is to be mild steel straps at minimum Cts of 2 metres.

The wall plates are to be C16 grade 100mm x 50mm timbers secured to walls by 32mm x 6mm galvanized mild steel straps which will be at 1200mm cts.

The wall plates will be secured at right angles with dragon ties.

All the lead work is to be 5lb lead.

Where the new roof abuts the wall form a cavity tray if wall is cavity construction.

The insulation is to be 100mm Kingspan insulation sheets with a 6mm plywood backing laid above the joists to create a warm roof situation.

WINDOWS AND DOORS.

Windows to be double glazed with "K" glass low emissivity type with 16mm air gap between the panes.

All windows are to have an area that opens that is equal to 1/20th of the total floor area.

The total area of glazing is to be no more than 25% of the total floor area.

The background ventilation will be achieved by installing trickle vents equal to 8000mm².

To provide a waterproof seal then line the outside of window where it is in contact with the brickwork with a mastic.

All the critical areas will be safety glass to conform to BS 6206 and part K and marked accordingly, alternatively a supply invoice or certificate is to be provided upon completion.

All external glazed doors are to have a U Value of 1.6W/M²K.

Manufacturer and installer will confirm that the windows will have a U Value of 1.6W/M²K and the doors to have 1.8W/M²K.

Ensure that all toughened glass is in accordance with BS EN 12600.

Ensure all doors and windows comply with PAS 24 requirement.

The windows and doors will be timber and match the existing in colour, style and design.

LIGHT FITTINGS.

75% - 100% of all the new internal light fittings are required to be energy efficient with a luminous efficiency greater than 45 lamp lumens per circuit-watt and the total output greater than 400 lamp lumens is required.

ROOF LIGHTS.

The roof lights are to be to the manufacturers details and specification.

Use factory sealed double glazed units with min air gap of 12mm and use low – E glass.

Form double rafters to both sides of the opening for the roof light.

All the flashings and seals that are to be used are to be the manufacturers products.

The roof lights are to achieve a class AA, AB or AC designation.

The boxing to the sides of the roof lights is to be 75mm Kingspan or similar.

High level roof vents are to be positioned either side of and between the roof lights to aid cross ventilation.

The roof lights will be the low pitch roof window system supplied by Forticrete and are guaranteed by the manufacturer to perform at a pitch as shallow as 10 degrees.

If using Velux products at a roof pitch that is below 15 degrees then use a Velux EAW Mk 04 6000 low pitch tile flashing or the equivalent.

LANTERN.

The lantern roof is to be manufactured by a specialist contractor and installed to their details and use all glazing, flashings and seals that are the manufacturers products.

The glazing is to achieve a class AA, AB or AC designation.

The boxing to the sides of the lantern is to be 75mm Kingspan or similar.

Form double rafters to both sides of the opening for the roof light.

UNDER-FLOOR HEATING.

The new floor is to have underfloor heating, could be the electric type or the water-filled type.

If electric type then the wires or the mats will be taped down onto the top of the insulation and below the concrete slab.

If the under-floor heating is to be the water-filled type and the pipes will be connected to the existing boiler via a manifold and the pipes will be laid in a sand and cement screed.

The waterfilled under-floor heating is to be installed by a qualified installer.

HEATING (optional).

Extend / modify the existing hot water system to accommodate new radiators.

The extended new heating system is required to include thermostatic radiator valves.

Installer to discuss with the client the position, design, size and type of radiators to achieve adequate temperature levels in each space.

All work involving a gas installation, must be carried out by a gas safe registered contractor and carried out in accordance with all the current regulations

ELECTRICS.

All new electrical sockets and switch positions to be discussed with the approved contractor prior to work commencing and must comply with the building regulations.

The design, installation and testing of the electrics are to be undertaken by an installer registered under a suitable electrical self certification scheme i.e. NICEIC or ECA or alternatively by a suitably qualified person who is competent to issue an installation, commissioning and testing certificates for works in accordance with BS 7671. Prior notification must be gained from the inspecting officer to establish which route the applicant / contractor wishes to undertake.

When any electrical installation work is classed as an extension, an alteration or a change of use then the existing and fixed electrical installation are to be checked to establish that they meet the requirements and that the mains supply equipment is suitable.

SCAFFOLD.

The correct installed and erected scaffold will need to be used to work on the existing and new works.

PARAPET WALL.

The parapet wall will be at least 300mm in height and have a 450mm wide coping stone style finish.