

NOTES

General

This drawing to be read in conjunction with all of our drawings 2073/01 to 04
For the planning drawings refer to the Stuart Pearl & Associates Drawings
All works to be carried out to the relevant British Standards, Codes of Practice etc
Do not scale drawings
All dimensions to be checked on site prior to commencement of any work.
The new works are not to encroach/ over sail into/ over the adjoining property/ land
Do not carry out any work on the adjoining properties without the written permission of the owner and tenant
Client to ensure he has all of the relevant party Wall Notices before works commence
Levels of beams, ceilings etc to be discussed and agreed with the client prior to work commencing

Below Ground Drainage

The contractor is to confirm/ determine the location, direction and function of any drains prior to commencement of work. Drainage layout to be agreed with the Local Authority Building Inspector prior to commencement of works
Where there are drains within 1.0m of the building the footings are to be taken down to below the invert level
Where a dual drainage system exists the contractor is to ensure that both surface and foul water drains are connected into the correct system
All new drains are to be 100mm diameter Hepaleave with flexible joints or similar laid to a 1 in 40 fall with a 100mm granular surround
At the head of the drains provide a rodding eye.
Provide a manhole where drains meet as specified on the drawings
All drains passing under the new extension to be encased in a 150mm concrete sleeve
Where a drain passes through a footing it is to be bridged with a reinforced concrete lintel
There is to be 50mm clearance gap to the sides which is to be infilled with compressible board
All new gullies to be roddable.
All waste pipes and rainwater pipes are to discharge into the gully below the grate but above the trap

Above ground drainage

All sinks, hand wash basins, baths and shower etc to be connected to 50mm diameter plastic waste pipes with a 75mm deep anti siphonic trap
New soil and vent stacks to be 100mm diameter with rodding points at each elbow and ground level. The stack is to finish not less than 800mm above any opening light. Fit a vent cowl to the top of the stack
No connection is to be made to the soil stack within 200mm from the centre line of the panam connection
Rainwater gutters to be 100mm half round or match existing, to be nailed to 25mm soft wood fascia. Provide 75mm diameter rainwater down pipes or match existing.

Timber

All timber to be grade C16 unless noted otherwise and to be fully treated.
All cut ends to be treated

External walls

All blockwork to be lightweight aerated block with a density of less than 10KN/m³ as Celcon or similar

Brick outer, cavity, block inner

Basic construction to be 103mm thick solid brick outer leaf to match the existing brickwork, 100mm 7N solid blockwork inner leaf, 100mm cavity with 45mm Kingspan TW50 cavity insulation or as agreed with the Building Inspector to give an average U-value of 0.3W/m²K

Rendered block outer, cavity, block inner

Basic construction to be rendered outer leaf on 100mm solid blockwork inner leaf, 100mm 7N solid blockwork inner leaf, 100mm cavity with 35mm Kingspan TW50 cavity insulation, or as agreed with the Building Inspector to give an average U-value of 0.3W/m²K.

Stainless steel wall ties at 750mm centres horiz, 450mm centres vert staggered, double up around all openings.

Below ground the cavity is to be filled with weak mix concrete within 225mm of dpc
Continuous horizontal dpc's to be provided in both leaves of the external walls not less than 150mm above ground level with minimum 100mm laps
Provide cavity tray/ weep holes above all door/ window openings
Provide insulated vertical dpc at reveals
Provide vertical dpc to all cavity closures
Ensure the cavity is maintained where the extension meets the existing house
All walls to be plastered internally.

Internal walls

Stud walls to be 50x75mm vertical studs at 400mm centres, noggins at 600mm centres with sole and head plates fixed to the floor and ceiling. Provide 40mm Quietzone Acoustic Blanket sound insulation between the studs. Clad in 12mm plasterboard and skim finish
Where the wall sits on the floor double up the floor joists

Lintels to internal walls

Carline and IG Lintels to have 150mm end bearing unless noted otherwise
Lintels to external walls to be insulated with cavity wall trays
Naylor precast concrete lintels to have 100mm end bearing

Timber

All timber to be C16. All cut ends to be treated

Timber floors

Provide 19mm flooring grade plywood nailed to C16 timber floor joists with 12 6mm plasterboard and skim to floor joists. Joist ends to be treated with three coats of green Cupral and wrapped in dpc
Floor joists to be doubled up under stud walls
Strutting to floor joists to be -
Less than 2 5m span none
2 5m to 4 5m span one row at mid span
over 4 5m span two rows at third span
Solid studs to be at least 38mm wide by 0.75 times the floor joist depth
Herringbone strutting is to be 38x38mm timber size but should not be used where the joist centres are greater than three times the joist depth
Provide 100mm Rockwool insulation with density of 45Kg/m³.
Floor joists to be doubled up under stud walls

Concrete ground floors

Use 30x5mm galvanised mild steel BAT straps 150x850=1000mm at 1 5m centres to all the roof timbers and floor joists
Use at least four fixings per strap, 8awgx75mm long nails or No12x60mm long wood screws. Gable walls to have lateral restraint straps to each rafter
The strap is to run along the joist or pass over at least three joists
Where the strap passes over the joists provide noggins at least 38mm wide by half the joist depth
Where the joists run parallel to the wall ensure that the first joist/ truss is packed hard up to the wall

Lateral restraint straps

Use 30x5mm galvanised mild steel BAT straps 150x850=1000mm at 1 5m centres to all the roof timbers and floor joists
Use at least four fixings per strap, 8awgx75mm long nails or No12x60mm long wood screws. Gable walls to have lateral restraint straps to each rafter
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Where the joists run parallel to the wall ensure that the first joist/ truss is packed hard up to the wall

Vertical restraint straps

Vertical restraint straps to wallplates to be 30x2 5mm galvanised mild steel BAT straps 100x800=1000mm long at 1250mm centres, fixed with 6No fixings

Stairs/ balustrades

New timber stairs to be to specialist manufacturers details
Balustrade to be 1100mm high and the railings are to be such that a 100mm diameter ball cannot pass through the openings

Flashings and cavity trays

Provide Code 4 lead flashings at all abutments with 150mm up stand bedded with cavity trays and dressed down as least 150mm over the roof covering tiles
Provide weep holes at 900mm centres max to the outer leaf of the external wall construction over lintel positions or at lowest level of cavity wall tray for stepped cavity trays

Ventilation/ windows/ doors

The new windows and doors are to be uPVC or timber to the Clients instructions
All new windows and doors to be double glazed with a 16mm argon filled air gap and a "soft" low E coating (Pilkingtons K glass). All windows to be FENSA approved
Use 10mm continuous soffit with baffle plates at eaves level and ridge tiles
All habitable rooms to have 8000mm² trickle ventilation
Patio doors to have night vents providing 10,000mm² ventilation
Kitchens to have 60/sec mechanical ventilation
Bathrooms without operable windows to have 15/sec mechanical ventilation with an automatic extract (capable of being turned off) with 15 minutes over-run
Window area to be not less than ten percent of the floor area
Opening lights to be not less 1200th the floor area
All door and window glazing below 0 8m to have toughened glass
Escape windows to have a clear openable area of at least 0 35m² with a minimum dimension of at least 450mm

Main pitched roof

Rafter and ceiling joists should be supported on 47x97mm pressure impregnated soft wood wallplate strapped down to wall with vertical restraint straps
Roof finish to be approved by the Local Authority planners and the client
Two layers of 150 + 150mm mineral wool insulation laid lateral to each other laid over the ceiling joists. Ensure the roof ventilation is maintained
Roof voids to be ventilated at eaves level minimum 15mm continuous or equivalent with insect mesh
All fascias to be 25mm pressure impregnated soft wood
As pitch abuts vertical cavity walling, install stepped cavity tray set over code 4 lead stepped cover flashing turned down face of wall over Code 4 lead stepped soaker flashing
Valley gutters to be Code 4 lead laid on 150x25 timbers
All work to the existing roof is to be to the clients requirements

Slate roof

The new slate tiles are to match the existing roof finish. Ensure the slate is installed to the manufacturers instructions
Use 30mm copper or aluminium clout nails secured 50x38mm treated softwood battens secured with 65x3 35mm galvanised steel nails through single layer breathable Tyvek untearable roof felt (minimum 200mm laps) of rafters

Clay roof tiles

The new clay tiles are to match the existing roof finish. Ensure the tiles are installed to the manufacturers instructions
Use 30mm copper or aluminium clout nails secured 50x38mm treated softwood battens secured with 65x3 35mm galvanised steel nails through single layer breathable Tyvek untearable roof felt (minimum 200mm laps) of rafters. Nails to be confirmed once the tile type is known

Warm flat roof

Roof joists should be supported on 47x97mm pressure impregnated soft wood wallplate strapped down to wall with vertical restraint straps
Provide 3No layers of high tensile roofing felt by Anderson or equal approved on 120mm Kingspan TR21 Thamaarof insulation on 16mm external quality WBP plywood decking on timber roof joists. Provide 9 5mm foil backed plasterboard
Roof should be should slope down towards the rainwater outlet

Steelwork

Steelwork to be new grade 43 Structural Steel shot blasted to SA 2 1(12) prior to priming
All steel beams are to be embedded in the floors/ walls where possible. This is to be discussed with the client/ builder
The openings are to be propped. The brickwork is to be hard packed to the steelwork with steel shims prior to filling with a non shrink grout
Steelwork connections to be designed for the unfactored reactions as given
All steelwork connections to have at least two number M16 grade 8 8 bolts. Use minimum 10mm plate
Use minimum 6mm fillet welds of minimum length 200mm unless noted otherwise
All welding to be carried out by a welder Registered with Lloyds of London
Steel beams are to be encased in two layers of 12mm plasterboard with staggered joints and skimmed. fixed to 44x44mm square timber cradles
Steel beams to have 100mm end bearing on grade 20N concrete padstones, size 215x100x150mm deep unless noted otherwise. If there are two beams side by side use a padstone 440x100x15mm deep. Beams ends to be fully built into the wall

Central heating/ conservation of heat

The conservator of fuel and power is to be to Part L of the Building Regulations
The heating and hot water systems are to have efficient controls
The boiler (combined) is to have an 90% SEBUK efficiency rating
Central heating to be altered by CORGI registered plumber to clients requirements
Energy/ heat sh- it to be conserved by reducing air leakage by maintaining insulation, blocking up around pipes, holes etc. Refer to DEFRA Robust Construction details

Electrical services

Electrical Services locations and type to be agreed with client
The internal and external lighting is to be designed to use energy efficient fitting and controls
All electrical work is required to meet Part P (Electrical Safety) and must be designed, installed and tested by a person competent to do so
Prior to completion the Local Authority must be satisfied that either -
An electrical installation certificate issued under a Competent Person Scheme has been issued
or
Appropriate certificates and forms defined in BS7671 (as amended) have been submitted that confirm that the work has been inspected and tested by a competent person. A competent person must have a sound knowledge and experience, relevant to the nature of the work undertaken and to the technical standards set down in BS7671. They must be fully versed in the inspection and testing procedure contained in the regulations and employ adequate testing equipment

Smoke detectors

Smoke detectors to be installed in all circulation areas of each floor, adjacent kitchen and living rooms. The self contained smoke alarms are to be mains wired to a separate fuse, with battery back up and interconnected so that all detectors sound should one be triggered