



Building Notes

**Main Roof**  
Roof tiles to match existing on 25x38mm s/w battens on corvin 150 vapour permeable roofing felt on trussed timber rafters bearing on 75x100mm sw wallplates. Plasterboard and skim finished.  
Trussed rafters to be designed and braced to BS5768 parts 2&3  
All calculations on bracing details to be provided by specialist truss manufacturer prior to erection.  
To all triangular roof joists provide 270mm of fibre glass quilt (170mm laid between joists with 100mm laid over top at right angles)  
Provide ventilation to roof space using REDLAND Redvent 25  
Over Fascia vents fitted to manufacturers instructions.  
Provide high level roof vent tiles if necessary.  
Provide 5x38x90mm long mild steel straps fixed over wall plate and fixed to wall at max 2m c/c.  
Provide 19mm ply wood fascia board and soffit at eaves to receive 100mm dia. UPVC half round gutter draining to 68mm dia. Rwp.  
To form all valleys provide 25x175mm code for lead lined valley boards to support feet of rafters.

**Vaulted Roof**  
Interlocking roof tiles suitable for the pitch on 38x50mm treated battens on layer of breather membrane eg Tuf Perno, draped over rafters with a min 25mm air gap above the insulation. The membrane will allow moisture to drain into the gutter.  
150mm Kingspan Thermo Pitch TP10, between 200mmx50mm SC3 Grade sw rafters @ 400mm ctrs, for 4,000mm span.  
The roof will be plated on the underside with 12.5mm thick Douglas Fir ply nailed with 4mm dia x 75mm long nails at 75mm centres to the underside of the rafters. The roof will be finished internally with a 9.5mm pbd & skim. The roof will have a 150mm code 4 lead flashing and apron flashing at its junction with the wall. A cavity tray will be used with the flashing to prevent the ingress of water. The top ends of the rafters will be birdmouthed onto a 150x50mm sw wallplate and fixed with truss clips. The wallplate will be rawnbolted to the wall with 12.5mm dia rawbolts at 900mm strs. The base of the rafter will be birdmouthed onto a 100 x 75mm sw wallplate and fixed with truss clips. The wallplate will be strapped to the wall with 30mm x5mm ms straps at 1,200mm centres. End rafters to be resin batted @ 900mm centres into the adjacent walls to prevent shear with (a min 40 10mm dia resin bolts). The rafters will be doubled where trimmed around the roof lights.

**Walls**  
102.5mm brick work outer leaf (type to match existing)  
100mm full fill cavity with insulation and 100mm thermalite blockwork inner leaf to give overall U value of 0.28 w/m2k.  
Plaster and skim internally. Provide splade weak mix concrete cavity fill a minimum of 225mm below dpc level with stainless steel vertical twist wall ties at maximum centres of 450mm vertical c/c and 900mm horizontal c/c and to be staggered at door and window openings. Stagger to be 300mm. Ties to be in accordance with BS 1234 and to be inclined to the outer leaf.  
Provide Hyload 4pc, or similar approved, a minimum 150mm above external ground level.  
Install IG stainless steel lintels (type LU580 with cavity tray dpc's over), or similar approved above all new door and window openings on external walls.  
Cavity to be closed at head with supalux.  
Cavity to be closed at openings with insulated cavity closes by DAMCORE.  
Use Domicore vertical dpc to all new external openings.  
Provide 5x38x90mm long mild steel restraint straps fixed across 3no. rafters, where rafters run parallel to walls. Allow for nogging between rafters. Provide weepholes at maximum 900mm c/c above ground level and above cavity tray dpc's. A minimum of 3 per opening is required.

**Sanitary**  
All new fittings to have 75mm deep seal traps or resealing traps if sink is more than 3.2m from gully. Sink to also have 78mm dia waste.  
Encase all drains under buildings in 150mm concrete.  
All foul and surface water drainage to be 100mm dia. approved type unless otherwise stated.  
Provide Lintels where drains pass through external walls.  
All sops to be boxed in and insulated to part L. Provide an unsealable access panel to enable full accessibility.  
All invert and cover levels to manholes to be agreed on site with local authority building inspector.  
all soakways to be designed in accordance with BRE Digest 365 and to be a minimum of 5m from building.

**Foundations**  
Concrete strip foundations: 700mm wide x 200mm deep with an approx. cover of 900mm (refer to section drawing).  
All internal load bearing walls built of 400mm wide concrete strip foundation.  
Foundations are to be to complete satisfaction of local authority Building Inspector and are to suit site conditions.

NOTES

**First Floor**  
19mm T&G boarding on 50x170mm s/w tanalised floor joists bearing on inner leaf of new external wall at 450mm c/c and joist hung from existing external wall with galvanised hangers.  
Underside of floor joists to be plated in 12.5mm plasterboard and skim finish.  
Provide strutting between all joists at mid spans (if possible)  
Provide 100mm mineral wool laid between joists to satisfy E2.  
Double up with joists below any first floor partitions.  
Provide 5x38x90mm long mild steel straps fixed to first floor front and rear walls at maximum 2m c/c.

**Ground floor**  
Construct ground floor in 75mm sand and cement screed on 150mm concrete slab on 85mm celotex insulation on 1200 gauge visqueen damp roof membrane on a sand blinded hard core in 150mm well compacted and consolidated layers.  
dpm to lap dpc.  
Provide 25mm of celotex to perimeter of slab and screed at external walls, to prevent cold bridge.

**General**  
Window areas of habitable rooms are to be 1/10th the floor area and are to be provided with trickle ventilation system or facility to give total area not less than 8000mm2. Window openings are to be 1/20th area.  
All openings to be fully draughtproof.  
All windows are to be double glazed with a 22mm gap and incorporating K glass. (u value of -1.6 w/m2k)  
All Bedroom windows are to have clear minimum openings of 850mm high x 500mm wide.  
Glazing to all bathroom and en suite rooms to be obscured.  
Glazing to all critical areas to be fitted with toughened, thickened, or laminated kite mark safety glass.  
Style of windows to be confirmed.

A self contained non maintained type interconnected smoke detection system is required in all hallways and landings.

Insert mechanical extract vents to kitchens, utility, bathroom and en suites to give minimum ventilation of:  
Kitchen - 60 litres / second  
Utility - 30 litres / second  
Bathroom and en suites - 15 litres / second  
A minimum 3 no. air charges per hour are required to each. Vent positions agreed on site.  
(provide 15 minute overrun to bathroom and en suites).

In order to satisfy building regulations all structural timbers used must be strength graded and marked Dry or KD.

Provide energy efficient lighting.

Efficiency & Locations of all new boilers to be confirmed by main contractor.  
Details of central heating system to be confirmed.  
Position of flue terminals to be in accordance with gas safety regs. & be installed by Corgi registered installer.  
All new radiators are to be fitted with thermostatic valves & to be in strict accordance with domestic heating guide.

All electrical works to meet part P & must be installed, inspected and tested, by a person competent to do so. An appropriate BS 7671 electrical installation certificate is to be issued by a person competent to do so after council is satisfied that part P has been complied with.

REVISION	AMENDMENT	DATE
CLIENT MR. & M <sup>rs</sup> COURT 27 NEWBOLD GROVE. CROXTETH PARK. WEST DERBY LI2 0NS.		
DRAWING TITLE PART FIRST FLOOR & TWO STOREY SIDE EXTENSION & SINGLE STOREY REAR EXTENSION.		
FULL WORKING DRAWINGS.		
SCALE 1:50, 1:100, 1:500	DRAWING No. 01.	REV.
DATE March 2015.		