Extension Construction Notes.

Staffordshire blue tiles to match existing dwelling on 38mm x 25 mm thk tanalized battens on 1 layer of tyvek breathable felt installed to manufacturers instructions on 150 x 47mm rafters at 35° pitch at 400mm centres. 145 x 47mm ceiling joists bolted to rafters (collar type roof) on 100 x 75 wallplate strapped down at 2 metre centres using 30mm x 5mm x 1metre long wallplate straps at 2metre centres each rafter strapped to brickwork using 30 x 5mm galv steel straps and turned over walls.

Lateral support to AD Part 1 para 1C37.

125mm thk kingspan in between rafters to sloping ceilings, underdrawn with 25mm thk insulated plasterboard and skim. 300 thk rockwool rollbatts comprising 1 layer of 150mm laid between ceiling joists and 1 layer of 150mm laid over at 90° to ceiling joists. Visqueen sheets between plasterboard and joists. "I," value of roof =0.16w/m²k

Ino corble at eaves level.

150 thk sandstone with 90mm cavity totally filled with rockwool cavity batts to start 150 below dpc and to be linked to roof insulation and to continue to full height of gable wall, 100 thk celcon solar blocks internal skin with 12.5mm plasterboard dry lining and skim.

"U" value of external walls = 0. 28w/m2k.

1st floor construction: - 22mm thk weyroc sheets on 195 x 63mm floor joists at 400 crs on restraint type galvanised steel joist hangers with herringbone strutting at mid span. Floor joists to have 100mm mineral wool between for sound insulation. 10mm thk foil backed plasterboard and skim.

Superior floor finish on 50mm sand/cement screed on 100 thk conc on 500 gauge vapour barrier above 100mm thk kingspan floor grade insulation board with 25mm thk kingspan upstand at perimeters of ground floor slab on 1200 gauge visqueen damp proof membrane linked to inner leaf dpc on 50 thk sand on 150 layer of sulphate free hardcore. Fine conc fill to within 150mm of dpc.

Foundation: - 600 x 230 thk concrete strip foundation minimum 1 metre below ground level.

Porch Construction Notes.

Staffordshire blue tiles to match existing dwelling on 38mm x 25 mm thk tanalized battens on 1 layer of tyvek breathable felt installed to manufacturers instructions on 100 x 38mm rafters at 35° pitch at 400mm centres. 95 x 44mm ceiling joists on 100 x 75 wallplate strapped down at 2 metre centres using 30mm x 5mm x 1metre long wallplate straps at 2metre centres each rafter strapped to brickwork using 30 x 5mm galv steel straps and turned over walls.

Lateral support to AD Part 1 para 1C37.

All other notes as detailed above.

General Notes

- Drains laid to falls & to the satisfaction of the building inspector. Where drains pass close to foundations the
 foundation should be taken down to the lowest level of the existing adjacent drains or the drains should be
 encased in concrete to the underside of the foundation concrete.
- 2. U value of extension to achieve a max of 0.28w/m²k for external walls, 0.16w/m²k for roof.
- 3. Cross ventilation to roof in accordance to reg F2, diagram 6.
- Electrical work to IEE standards with the design, installation, inspection and testing of the electrical installation to be carried out in accordance with BS7671:2001 and the certification to prove this.
- 5. Walls & ceiling finishes to reg B2.
- 6. Structural timber to be of C16 grade except where stated otherwise.
- Wall ties to be stainless steel to DD Type 4, AD Part A and to be spaced at 750mm horizontally and 450mm vertically.
- 8. Internal walls to be 75 x 50thk timber studding with 10mm plasterboard and skim both sides and with 100mm mineral wool in between for sound insulation.
- 9. Water supply to kitchen, bathroom and en-suites to comply with regulations G1 and G3.
- 10. Kitchen to have mechanical extract ventilation of at least 60 litres/sec (30 litres/sec if in cooker hood)
- 11. Bathroom and en-suites to have mechanical extract ventilation of at least 15 litres/sec.
- 12. Habitable rooms to have background ventilation of at least 10000mm by trickle ventilators to windows or through the wall ventilation.
- 13. Non habitable rooms to have background ventilation of at least 5000mm.
- 14. External lintels to be filled with fibre glass insulation
- 15. Glass in critical locations to comply with BSEN12150.
- 16. All new external frames to be pointed in mastic internally and externally.
- 17. All new double glazed windows to comprise 2no 4mm panes with a 20mm air space incorporating Low E glass to achieve a U value of 1.6w/m²k, and to be 'A' rated.
- 18. Rapid ventilation should be at least 1/20 of the floor area of all habitable rooms.
- Closures to all windows and doors should be via propriety insulated reveals achieving a U value of 0.45w/m²k.
- 20. All new radiators to be fitted with thermostatic valves.
- 21. Provide energy efficient lighting to para 1.54 Approved Document L1
- 22. Provide an interlinked smoke detection system to BS5839-6:2004 Grade D Category LD3 to be mains operated with a battery back up.
- 23. Soakaway to be built to BRE365 subject to a percolation test.

Outbuilding Refurbishment Notes.

Existing tiles, battens and felt to be removed and replaced with extg tiles on 38 x 25mmthk tanalized battens on 1 layer bitumen felt Extg rafters to be packed out to suit 125mm thk kingspan insulation, underdraw with 25mm insulated plasterboard and skim. New 125 x 50mm ceiling joists above extg 225 x 100mm purlins, 10mm foil-backed plasterboard and skim with visqueen sheets between plasterboard and joists.

300 thk rockwool rollbatts in 1 layer of 150mm and 1 layer of 150mm at 90° to each other.

"U" value of roof =0.16w/m°k.

90mm cavity totally filled with rockwool cavity batts to start 150 below dpc and to be linked to roof insulation and to continue to full height of gable wall, 100 thk 650kg/m celcon solare blocks or similar to all external walls. Vertical damp course where front wall abuts ground level.

Insulated dpc around all openings and insulated catnic lintels above openings.

Provide 5no/m stainless steel cavity wall ties.

Walls to be plastered internally in 2no coats 13mm thickness.

Provide dpc to all walls min. 150 above ground level and to be continuous with dpc to floor slab.

Rear wall repointed with all damaged bricks replaced. "U" value of external walls = 0. 30w/m²k.

Staircase constructed in accordance with part K building regulations. 890 wide parana pine stairs at 42° pitch, 11risers of 209.3mm, going 232.4mm, tapered stairs 209.3mm rise, minimum going 75mm. Nosing of tread to make an angle of not less than 20° with nosing of tread of step next above it. Handrail to be continuous and minimum of 900mm above pitch line. No part of stairs to allow a sphere of 100mm to pass through it. Stair clearances: 2000mm measured vertically.

First floor construction: 22mm weyroc sheets on 170 x 75mm thk floor joists at 400crs on restraint type galvanised steel joists hangers with herringbone strutting at mid span. Joists to have 100mm mineral wool between for sound insulation.

Grub up existing floor and relay comprising superior floor finish on 50mm sand/cement screed on 100 thk conc (thickened out to 250mm thk for solar blockwork) on 500 gauge vapour barrier above 100mm thk kingspan floor grade insulation board with 25mm thk kingspan upstand at perimeters of ground floor slab on 1200 gauge visqueen damp proof membrane linked to inner leaf dpc on 50 thk sand on 150 layer of sulphate free hardcore. Damp proof course to be provided by specialists.

Foul drainage – 100dia flexible jointed supersleve pipes laid on pea gravel bed to 1:40 falls connected to existing foul drain and back-filled with selected excavated material.

475 dia polypropylene inspection chambers.

112 hr pvc gutters, 63 dia downspouts to soakaway constructed to BRE 365 via btg's.

Provide mechanical extractor fans in en-suite (15 littes/sec), include 2no low level energy efficient light fittings to Para 1.54 Approved Document L1, install an interlinked mains operated smoke detection and alarm system. Electric sockets at be positioned at a height of 450mm and switches at a height of 1200 above floor level. Waste pipes to comprise 100 dia upvc soil and vent pipe, 40 and 32 dia wastes with 75 deep seal traps to BS5572:1978.

Cottage Refurbishment Notes.

Existing tiles, battens and felt to be removed and replaced with extg tiles on 38 x 25mmthk tanalized battens on 1 layer bitumen felt. Extg rafters to be packed out to suit 125mm thk kingspan insulation, underdraw with 25mm insulated plasterboard and skim with visqueen sheets between plasterboard and joists.

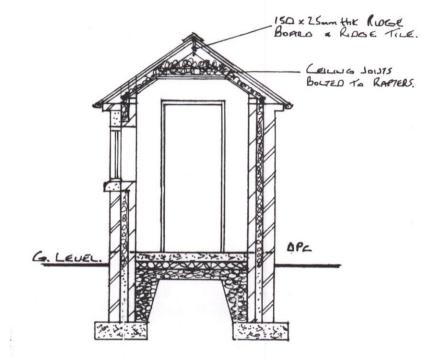
Fit 1no 560 x 980mm Velux conservation roof windows or similar to provide natural lighting positioned between extg doubled up rafters, box around opening using 75 x 50mm thk timber incorporating 75mm thk celotex insulation and finish with 25mm thk insulated plasterboard and skim. Roof window to be fitted with permanent trickle vent to provide 10000mm sq background venilation. Provide vent tile to top and bottom of window. 300 thk rockwool rollbatts in 1 layer of 150mm and 1 layer of 150mm at 90° to each other.

Visqueen sheets between plasterboard and joists. "U" value of roof =0.16w/m°k.

All ground floor walls that are to remain to be dry lined with 25mm insulated plasterboard and skim with the exception of the front walls which abut ground level which are to have all studding and insulation removed and finished with 90mm cavity totally filled with rockwool cavity batts, 100 thk celcon solar blocks built up off thickened out floor slab. (250mm thk concrete)

"U" value of external walls = $0.28 \text{w/m}^2 \text{k}$.

Grub up all existing floors and relay comprising superior floor finish on 50mm sand/cement screed on 100 thk conc on 1200 gauge visqueen damp proof membrane linked to inner leaf dpc on 100mm thk kingspan floor grade insulation board with kingspan upstand at perimeters of ground slab on 50mm sand on 150 layer of sulphate free hardcore. Provide dpc to all walls min. 150 above ground level and to be continuous with dpc to floor slab. Damp proof course to be provided by specialists



Typical Porch Section.

Notes For Outbuilding Refurbishment, Front Extension With Porch And Section Of Porch At Sunnybank, Wood Road, Longsdon, Staffs Moorlands For Mr. P. Porter.

Drg No 165/58/2

Date: November 11th 2015.

Scale:- Section 1:-50.