

CONSTRUCTION NOTES

1. **FOUNDATIONS:-**Grade ST1 concrete, min 750 deep or 1000 if in clay. At least to bottom of existing house foundations, to invert of any adjacent drains and suitable loadbearing strata.If clay subsoils are encountered, foundations to be designed in accordance with NHBC Appendix 4.2H. Remove all topsoil as necessary from the site of all proposed buildings to the satisfaction of the Local Authority. Retain for re-use or dispose of at the request of the owner. Existing foundations are to be exposed and shown to be suitable to sustain additional loading.
2. **D.P.C:-**Polymer type of d.p.c's to all walls min 150 above ground level. Thermabate insulated d.p.c. or similar to all reveals in accordance with manufacturers specification .D.p.c. to lap with d.p.m. min 50mm and be continuous with existing. Window frame to overlap cavity closer by 30mm.
3. **GROUND FLOOR SLAB:-**50 Sand cement screed on 100 concrete oversite, on 1200g poly vapour barrier, on 100 Kingspan Kooltherm K103 floorboard floor insulation, on 1200g poly d.p.m./Visqueen Radon R400 dpm on min 150 sand blinded consolidated hardcore. 25mm perimeter insulation between screed and wall. Max 'U' value 0.18W/m²K. Provide electric underfloor heating.
4. **EXTERNAL WALLS:-** 13mm Monocouche render painted cream on, 100 Thermalite Turbo, or similar, insulating blocks, and Face bricks to match extg 100 cavity with 90 Kingspan Kooltherm 106 or 90 Recticel Eurowall +, 100 Thermalite Turbo, or similar, insulating blocks. 13 lightweight plaster and skim internally. Cavity ties to B.S. 1243:1978, 900 horiz, 450 vert, 300 at jambs. Close cavity at eaves. Max 'U' value 0.18W/m²K
5. **INTERNAL WALLS:-**100x50 studs@600 ccs faced both sides with 12.5 pl/bd, min density 10 kg/m² and skim, voids filled with fibreglass min density 10 kg/m², on double joists where parallel to wall.
6. **FLAT ROOF:-** Firestone Rubberguard EPDM Fire Retardant grade roof system to BBA Agreement certificate 89/2216 on 150 Kingspan Thermo roof TR27 on 1200g poly dpm on 22 WBP ply on 50 to 0 firrings on 200 x 50 C24 flat roof joists @ 400 ccs to 0.15W/m²K Code 4 lead flashing and cavity trays at all roof abutments to Lead Development Association recommendations.
7. **PITCHED ROOF:-** Concrete interlocking roof tiles to match existing on battens on Tyvek Supro breathable felt on trussed rafters to BS 5268 Pt3 1985. 300 Isowool fibreglass insulation, (100 between and 200 above ceiling joists). Max 'U' value 0.15 W/m²K. Wall plate strapped to wall with 30 x 5 galvanised m.s. straps at 2000 max ccs fixed to 2no. block courses. Code 4 lead flashing and cavity trays at all roof abutments to Lead Development Association recommendations.
8. **FIRST FLOOR:-**21 Type C4 floor grade chipboard on 200 x 50 floor joists @ 400 ccs. underdrawn with 15 Knauf wallboard pl/bd, (2 layers to ceiling in garage area), min density 10 kg/m², (see www.knaufdrywall.co.uk) and artex, provide 200 fibreglass between min density 10 kg/m². All joists strutted @ 1/3rd span and doubled under partitions and baths.
9. **STAIRS:-**New stairs 850 wide,42degs. max. pitch, rise between 155 and 220 with go between 245 and 260, OR rise between 165 and 200 with go between 223 and 300, handrail 900 high, balustrading 900 high, max 100 gap between balusters, min 2000mm headroom, reduced to min 1900 at half width of stair, min 1800 at side. 50mm min go at winders. Provide continuous handrails, both sides of flights where flight width is 1000 or more, between 900-1000 above pitch line.
10. **LATERAL RESTRAINT:-**30 X 5 m.s straps @ 2000 max ccs to walls parallel to roof and floor timbers.
11. **LINTELS:-**IG L1/S 75 lintels over all openings unless stated. R.C. lintels in walls over drains and all voids filled with vermin proof material and compressible sealant and have concrete cover and surround as necessary
12. **MECHANICAL VENTILATION:-** *Kitchen:-* 60 l/s
Utility:- 30 l/s with 15 min overrun
*WC, Showers & Bath:-*15 l/s with 15 min overrun
All discharging direct to external air provide min 10mm air gap under bathroom door.
13. **S.W. DRAINAGE:-**100 diam ½ round pvc gutters to extg system, or 69 diam RWP's to 100 diam UPVC drain surrounded in 150 pea shingle at 1 in 40 fall to soakaway min 5m from building. Soakaway to be filled with washed rejects to a level 150mm above the invert of the highest incoming pipe and cover with 1000 gauge poly sheet. Cast a 100mm concrete slab over and build up to adjacent levels with topsoil in accordance with BRE Digest 365.
14. **F.W. DRAINAGE:-***Above ground:* Waste sizes to be: SVP's and W.C.'s 100 diam, W.H.B.'s, and sinks 50 diam all fitted with 75 deep seal traps, and rodding access at all changes of direction. S.V.P.'s to be encased in 9.5 pl/bd and skim on s/wd framing and terminate through roof 1m above window heads with durable cage.

*Below ground:*100 diam UPVC surrounded in 150 pea shingle to 1 in 40 fall to existing system. New IC's to be 450 diam Osma polypropylene.
15. **SMOKE ALARMS:-** One to be provided on each landing, or circulation space, interconnected and wired to main fuseboard within 7.5m of doors to every habitable room, and 3.0m of bedroom doors, not within 300mm of any light fitting.
16. **GLAZING:-**All doors & windows UPVC double glazed in Optifloat/argon/Pilkington 'k' glass, with low 'E' coating, EN = 0.1, 16mm air gap, argon filled to 'U' value 1.4 W/m²K, or Planitherm triple glazing one glass warm edge space argon gas 0.8W/m²K. Class A safety glazing, with trickle vents, min 8000mm² equivalent area in all habitable rooms, 8000mm² equivalent area in all wet rooms clearly marked by manufacturer (vent in wet room min 0.5m from mech vent) and opening lights equal to min 1/20th floor area, min opening area 0.33m² with min dim 750 high and 450 wide, with fire escape egress hinges, cill height between 800 and 1100 above floor level to bedroom windows. Provide min 10 mm gap at bottom of all internal doors to give overall 7600mm² vent gap. Provide bottom rolling bifold doors 'U' value 1.1 W/m²K.
17. **GUARDING:-** Guarding to French doors to be Class A safety glazing, min 1100 high, capable of withstanding lateral force of 1.0kn/m², a point load of 0.5kn and UDL of 0.74 kn/m, max gap 100mm.
18. **HEATING:-** Extg heating system extended to new rooms, rads fitted with thermostatic rad valves, all by a fitter on the Gas Safe Register.
19. **FIRE RESISTANCE:-** New steels encased in 15mm Glasroc Firecase board, with 2no Glasroc F Firecase soldiers at 1200ccs, or 12.5 Gyproc Fireline board with GypLyner fixing kit to ½ F.R., bearing plates bedded in min 25mm non-shrink grout and hard packing. Column baseplates anchored to concrete/blockwork using Hilti HIT-RE500 V4 Epoxy Anchor Resin.
20. **LOW ENERGY LIGHTING:-** Low energy light fittings to all new rooms.
21. **THERMAL:-** The building is to be constructed so there are no avoidable thermal bridges in insulation layers caused by gaps within elements, at joints between elements and at edges of elements such as those around window and door openings.
22. **PART P:-** All electrical work required to meet the requirements of Part P (electrical safety) will be designed, installed, inspected and tested by a person competent to do so, ie Part P certified. Prior to completion the Council should be satisfied that Part P has been complied with. This may require an appropriate BS 7671 electrical certificate to be issued for the work by a competent electrician registered with NAPIT, ELECSA, NICEIC or equivalent.
23. **GENERAL:-** Builder to check and verify all dimensions prior to works commencing on site. Builder to locate all drains in vicinity of proposal and ensure neither they nor building operations adversely affect each other. This plan is prepared for the sole purpose of seeking L.A. consents. All works to be in accordance with accredited construction details for Part L.