

**PROPOSED ATTIC ROOMS, EXTENSION and INTERNAL ALTERATIONS at
No 21 REDTHORPE CREST, WILTHORPE, BARNSELY**

DRAWING 2 of 2 – SECTIONS and NOTES

SCALES 1/50th



ATTIC ROOMS

Roof: Existing roof coverings, rafters and ceilings removed and replaced with proprietary manufacture 40 degree pitch Attic trussed rafters at 600 centres designed, manufactured and installed in accordance with BS 5268 Part 3: 1985; trusses to be have min 145 x 35 top and internal chords and min 175 x 35 bottom chords; specially fabricated multiple compound trusses to form roof around roof windows and stair well; specially fabricated monopitch trusses to kitchen extension hung off proprietary heavy duty hangers rawnbolted to block wall; all timber in trusses to be Class M50 to BS 4978; trusses fixed to wall plates on external walls and internal loadbearing block wall; diagonal bracing fixed to trusses in accordance with Truss Rafter Associations handbook and to satisfaction of Local Building Inspector; Calculations to be prepared by truss manufacturer before installation

Marley Double Roman interlocking concrete tiles to colour agreed with Planning Officer laid on 38 x 25mm tiling battens on untearable felt; proprietary plastic verge covers to roof edge; new 100 x 75 treated wallplates fixed to walls at max 1.8 metre centres with 30 x 5 x 1000 once bent galvanised m.s.straps; 30 x 5 galvanised mild steel anchors in lateral restraint to gables at max 1.8 metre centres built into wall and nailed across first 3 trusses on each top and bottom chord member; PVCu fascia and soffit board; 25mm foil backed plasterboard ceiling with 38 x 38 noggins at edges; 13mm 'Supalux' fire resistant boarding to garage ceiling; insulation to roofspace to be 300 Rockwool mineral fibre laid in two layers with first 150 thick layer laid between bottom chords and second layer laid at 90 degrees (U value of 0.16); insulation to stairwell and to sloping ceiling to be 70 mm Kooltherm K7 pitched roof board between rafters and 60mm Kooltherm K18 insulated dry lining board to underside of rafters to give a U value of 0.17; ventilators at soffit to give an equivalent area as 12mm continuous air gap

25 plg boarding on bottom chords with sound insulation of 100mm quilt of 10kg/sq.m mineral fibre to living areas; floor joists doubled up under studs

Existing gable cavity walls: Existing gable wall demolished above ceiling level in garage and full height from existing floor to roof level in kitchen; where remaining gable adjusted for new roof height cavity wall to be built off existing in 112.5 brickwork to match existing bungalow; 50 cavity and 100 Thermalite "Turbo" insulation block inner leaf; full cavity wall insulation to be Rockwool mineral fibre and with 35mm Gyproc Thermal Board Plus fixed to wall with plaster dabs and 5mm plaster skim finish to give U value of 0.29; cavity walls to have flexible stainless steel wall ties 750 horizontally, 450 vertically, and 225 vertically at openings; cavities to be continuous

Attic walls: 10mm plasterboard and 5mm plaster finish one side infilled with 80mm Kingspan Kooltherm K12 TW52 zero ODP rigid urethane insulation board held in place by timber battens; plasterboard to be foil backed to act as vapour 13mm external grade plywood to roof void side of truss

STAIRCASE: 850 wide, 41 degree pitch timber staircase with 200 risers and 230 treads; treads to overlap tread below by 15mm; headroom minimum 2 metres measured vertically above pitch line and 1.5 metres measured at right angles to pitch line; balustrade fixed to open side of stair 900 above pitch line with vertical spindles fixed at 100 pitch; risers ex 25 timber, treads ex 38 timber and strings ex 250 x 38 timber

VENTILATION

"Velux" roof windows as described below to each room (or similar approved) fixed between trimmed rafters in accordance with manufacturers instructions; roof windows to be double glazed units fitted using proprietary fixing kits and flashings, windows to have trickle ventilation 8000 sq.mm in area

Bedroom 3: doubled up roof windows to be Type GGU 0059 M04 780 x 980 centre pivot to upper frames with Type GHU 0059 M04 top pivot to upper frames; each pair of upper and lower frame set separated with compound trusses; one lower window modified to be emergency escape window opening to give minimum clear opening 550 x 850 high

Bedroom 4: Two number Type GGU 0059 660 x 1180 centre pivot; new window to front elevation to be 16mm double glazed PVCu units fitted with low E coating glass; escape window to be side hinged casements opening through 90 degrees, minimum opening 550 x 850 high with floor to sill height max 1100

Ensuite shower rooms: Type GGU 0059 C02 550 x 780 centre pivot roof window together with mechanical extractor fan of min 15 litres/sec capacity capable of intermittent operation with 15 minute overrun

Landing: Type GGU 0059 550 x 980 centre pivot roof window

Existing foundations and lintels to loadbearing walls exposed for checking by Local Building Inspector to ensure they will cater for additional loads, if not foundations are to be underpinned and lintels replaced as required

Offshot roof to be trussed rafters and all construction as above with Code 4 lead valley lapped under roof coverings minimum 225

EXTENSIONS

Roof: 40 degree pitch Attic trussed rafters as described above

Cavity walls: 112.5 thick external leaf in brickwork in colour to be approved by Planning Officer and to match existing house; 75 cavity and 100 Thermalite "Turbo" insulation block inner leaf with 3mm plaster skim on 12.5mm internal plaster board fixed with plaster dabs; full cavity wall insulation to be Rockwool mineral fibre to give U value of 0.29; cavity walls to have flexible stainless steel wall ties 750 horizontally, 450 vertically, and 225 vertically at openings; cavities closed at reveals, cills and eaves and cavities to be continuous; Thermalite insulated cavity closer at openings fixed in accordance with manufacturers instructions; brickwork and blockwork fully bonded to existing walls alternate courses; wall below ground level to be in 7N/sq.mm Thermalite tongue and groove trench blocks; Caltric Cougar open backed lintels Type CG75/1100 with min 150 end bearing; tray dpc over lintels with weep holes; dpc to be min 150 above adjacent ground level and to be tied into existing dpc

Cavity walls built off concrete strip foundation to be minimum depth and size shown on section but will be taken down to depth and suitable strata as required by local Building Inspector

Internal block wall to garage: 190mm thickness of Thermalite "Turbo" blockwork with 35mm Gyproc Thermal Board Plus fixed to wall with plaster dabs and 5mm plaster skim finish; internal wall built off 450 x 150 concrete foundation

Garage floor: 150 compacted thickness of selected hardcore; 100 structural concrete with 1200 gauge dpm under 40 concrete screed; min 150 max 200 step down into garage

Suspended floors to kitchen and study: 25 plg boarding on 170 x 38 joists in Class SC3 timber at 450 centres built into load bearing walls both ends; 30 x 5mm lateral restraint straps at 1.8 metre centres built into blockwork and nailed across first three joists with timber noggins to brace straps; subfloor vented with 225 x 150 airbricks at 900 centres starting 450 from corners; airbricks boxed through cavity with tray dpc over; 110 thick Celotex tuff-R zero GA3000 insulation board fixed between joists on 25 x 25 timber battens screwed to joists or Celotex insulation clips to achieve a U value of 0.22; 100 oversite concrete at or above adjacent ground level with min 150 clearance below bottom of joists

Ventilation: New windows to be 16mm double glazed PVCu units fitted with low E coating glass; opening area minimum 5% floor area of room served; windows to have "trickle" ventilation 8000 sq.mm in area; safety glazing to BS8206 to French windows including side panels; glazing between finished floor level and 800mm in windows and between finished floor level and 1500 in doors to be safely glazing to BS 6206

Kitchen: vented with mechanical extractor fan of min 60 litres/sec capacity (30 litres/sec if incorporated in cooker hood); kitchen fan also capable of intermittent operation

Bedroom: vented with window having obscure glazing and some part of opening light 1.750 above floor level together with mechanical extractor fan of min 15 litres/sec capacity capable of intermittent operation with 15 minute overrun

GENERAL NOTES

Drainage: Ensuites and bathroom connect to existing external 100 dia SVP with common 100 waste running through roofspace in PVC clipped to wall at 600 maximum centres at min 1 in 40 fall; 75 deep seal trap to all appliances with 32 waste to hand basins, 38 waste to showers/bath and 100 waste to WCs; no waste connected to SVP within 200 of WC connections; 38 waste to new kitchen sink to existing back inlet gully; 110 x 63 gutters to discharge to existing rainwater gullies; all adjustments to drain connections made using 100 diameter clayware pipes and fittings with patent push fit flexible joints laid to a minimum gradient of 1 in 40; new 450 dia polypropylene IC on 150 concrete base with cast iron cover and frame; minimal increase in sw discharge from roofs in to existing drainage system; drain passing under extension to be protected by taking foundations below level of pipework with concrete lintel to support walls; all work to satisfaction of Local Building Inspector

Hot and cold water supply to ensuites; central heating and domestic plumbing insulated in accordance with requirements of Building Regulations; Thermostatic radiator valves to all new radiators

Smoke alarms: fitted in locations shown in accordance with BS 5839-8:2004; smoke detectors to be wired to mains electrically with separate fuse in fuse box; alarms interconnected so that both sirens sound if one detector triggered; battery backup to detectors

Plumbing: All work on gas installation to be completed by Gas Safe registered tradesmen in compliance with Part J of Building Regulations to satisfaction of Local Building Inspector

Electrical: All electrical work to be carried out by "Competent Person Scheme" member who is qualified to complete a BS 7671 Installation Certificate; Certificate to be copied to Local Building Inspector; all new lights to have energy efficient fittings