

DORMER FLAT ROOF - to achieve 0.25 U Value
Single ply polymeric or three ply built up felt roofing on 22mm external quality plywood decking, on minimum gradient 1:60 treated timber furring strips laid to falls to gutter, on 47x150mm treated softwood joists at 400mm centres spanning between external wall and ridge beam. (Note: maximum span 2500mm). Maintain 50mm ventilated cavity and fit 60mm rigid insulation, e.g. Celotex GA4060, between joists and Celotex PL4060 insulated plasterboard to the underside (60mm insulation plus 12.5mm plasterboard). Tape, fill and set all joints in plasterboard.

EXTERNAL WALLS FF - to achieve 0.30 U Value
Tile hung with plain concrete Redland tiles to match existing, on 38x25mm treated softwood tiling battens, on Tyvek or similar breathable membrane, on 12mm external plywood or OSB sheathing fixed to 47x100mm treated softwood framing members at 400mm vertical centres, with head and sole plates and intermediate struts as necessary. Fill cavity between framing members with 100mm thick fibreglass insulation roll. Fix 47x25mm treated softwood battens at 400mm centres then Celotex PL4000, or similar, insulated plasterboard layer, 60mm insulation and 12.5mm tapered plasterboard. Tape, fill and set all joints in plasterboard.

SEPARATING FLOOR
2400x600x22mm moisture resistant T&G chipboard panels screwed to 47x175mm treated softwood joists at 400mm centres spanning between existing steel joists and between steel joists and external walls. Note: maximum span 2150mm. 12.5mm foil backed plasterboard to underside of joists, and mineral wool, glass fibre or rigid insulation board between joists to fill cavity. Ceilings to achieve 30 minutes fire resistance from the underside.

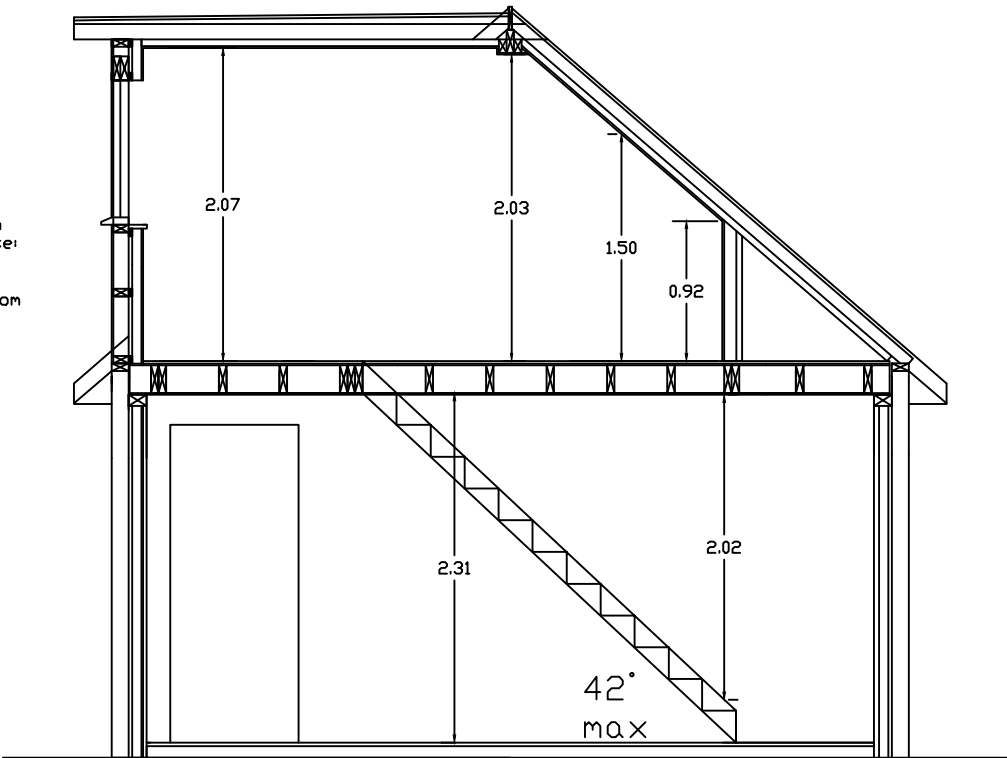
GROUND FLOOR - to achieve 0.25 U Value
Cover existing reinforced concrete slab with 3 coat Synthaprufe liquid DPM and continue up the internal brickwork wall face to at least DPC level. Lay separation layer, if required, then minimum 75mm thick rigid board insulation e.g. Celotex GA4080 or similar. Cover insulation boards with 1000g polythene DPM with glued 22mm T&G moisture resistant chipboard flooring panels over.

EXTERNAL WALLS GF - to achieve 0.30 U Value
Fix treated 47x25mm softwood battens at maximum 400mm centres to existing single skin brick walling. Coat wall side of batten with Liquid DPM or use fibre board separation layer. Fix thermal insulated plasterboard layer to battens e.g. Celotex PL4000 with 60mm insulation and 12.5mm tapered plasterboard. Tape, fill and set all joints.

EXTERNAL WALLS FF - to achieve 0.30 U Value
Tile hung with plain concrete Redland tiles to match existing, on 38x25mm treated softwood tiling battens, on Tyvek or similar breathable membrane, on 12mm external plywood or OSB sheathing fixed to 47x100mm treated softwood framing members at 400mm vertical centres, with head and sole plates and intermediate struts as necessary. Fill cavity between framing members with 100mm thick fibreglass insulation roll. Fix 47x25mm treated softwood battens at 400mm centres then Celotex PL4000, or similar, insulated plasterboard layer, 60mm insulation and 12.5mm tapered plasterboard. Tape, fill and set all joints in plasterboard.

PITCHED ROOF - to achieve 0.18 U Value
Redland plain concrete roofing tiles to match existing on 25x38mm treated timber tile battens, on Tyvek or similar breather membrane, on 47x100mm treated rafters at 400mm centres. Fit Celotex GA4080 or similar, rigid insulation between rafters and Celotex PL4000 Insulated plasterboard under rafters (45mm insulation plus 12.5mm plasterboard). Tape, fill and set all plasterboard joints.
Form roof support timber stud walling in 47x100mm treated sawn softwood built off double 47x175mm joists spanning between existing steel sections or from steel sections to external walls. Fit vertical studs at 400mm centres with rigid thermal insulation between and 12mm plywood skin glued and screwed to studs and 12.5mm foil backed plasterboard skin over. Insulate roof void with 150mm fibreglass insulation between joists and additional 170mm across joists, or other approved to provide 0.16 U Value.

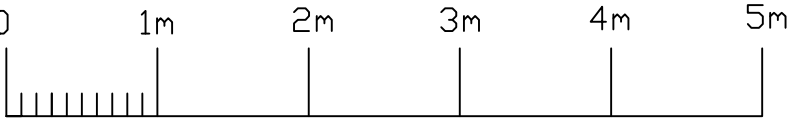
STAIRS
New stair pitch not to exceed 42 degrees, and stairs to have 2000mm minimum headroom above the stair pitch line, with rise and going to be equal, with twice the rise plus the going to be between 550 and 700mm. Continuous handrail at a height between 900 and 1000mm above floor/nosing levels is to be provided to one side of the stairs and all guarding is to be at a minimum of 900mm above floor/nosing levels and continuous throughout their length, with non climbable vertical balustrading, no gaps to exceed 100mm and all constructed to resist a horizontal force of 0.36kn/m2. Typical staircase construction to be: ex 230x35mm side strings, ex 32x63mm capping, 25mm thick treads, 12.5mm plywood risers, ex 75x75mm newel posts, ex 75x63mm handrails.



PROPOSED SECTION

INTERNAL STUDWORK WALLS
Build new studwork walls with 47x100mm treated softwood head and sole plates and vertical studs with intermediate rails at maximum 400mm centres. Fill cavity between framing members with glass or mineral wool insulation and fix 12.5mm plasterboard layer to inner and outer faces. Tape, fill and set all plasterboard joints.

WINDOWS AND DOORS - to achieve 2.0 U Value
Fit FENSA approved PVCu windows and doors to compliment those fitted to the main House. Sealed double glazed units incorporating a 16mm air gap and inner pane of low-E type glass. Openable ventilation area to be equivalent to 1/20th total floor area. Trickle ventilation to provide background ventilation of 8000mm2 for any habitable room and 4000mm2 for any other room. All internal doors to be 1/2 hour fire rated construction. Doors and adjacent sidelights/windows within 1500mm of ground and floor level, and 300mm of doors and windows within 800mm of floor/ground to be safety glazed to BS EN 12150, BS EN 14179, and BS EN 14449.



Scale

General Notes

No.	Revision/Issue	Date

Title

PROPOSED SECTION

Project Name and Address

Convert detached garage into Granny Annexe
7 Treeside Way,
Waterlooville,
Hampshire, PO7 7JU

Project

Date March 2015

Scale 1:500 A3

Sheet

1810/06

P