



**Building Regulation and general construction notes
for a side extension to form internal stairway at
Churchill House 57 Jubilee Road, Waterlooville Hants
for Mr T Town.**

March 2021

Note – Details and dimensions to be checked on site prior to any commencement of work and any queries, variations or discrepancies directed to agent.

Measurements to be taken from site and not scaled from the drawing.

The following notes and accompanying drawings do not constitute a full specification of work as this has been produced solely for the purpose of obtaining the necessary local authority consents/approvals.

Party Wall etc Act 1996 – As the building works are not within three metres from any dwellings, this Act does not apply to this project.
For further information, see the Planning Portal website at www.planningportal.gov.uk

Construction (Design & Management) Regulations 2015

Where more than one contractor is involved then a principal designer and principal contractor must be appointed.

A Construction Phase Plan to be produced.

A health and safety file to be prepared.

If work lasts longer than 30 working days and has more than 20 workers working simultaneously at any given point in the project or exceeds 500 person days then HSE needs to be notified.

Note – It is understood that the existing concrete framed building has been constructed on standard concrete foundations.

The new extension to be constructed on similar concrete foundations as noted below.

Removals - Remove the existing concrete stairway

Remove the existing window at first floor level and make good wall

Mono Pitched Roof – Sandtoft 20 / 20 interlocking tiles suitable for a 25 degree pitch and with a colour to match the existing tile hanging on 25 x 38 treated softwood battens on Tyvek Supro or Kingspan Nilvent breather underlay draped over 47 x 150 C24 grade rafters at 400 centres.

The upper end of roof to be supported on 47 x 225 C24 grade timber resin bolted to wall at 500 centres.

The lower end of roof supported on 47 x 100 wall plates that are strapped to walls using 30 x 5 galvanised steel straps at 2000 centres.

Trim the rafters to 47 x 100 by wall plate to help keep the fascia and soffit a reasonable size.

Rafters to be strapped to new end walls using 30 x 5 galvanised steel straps at 2000 maximum centres.

Roof to be insulated with 100 Celotex GA4100 rigid insulation fitted between the rafters with the underside flush with underside of rafters.

Clad underside (including any horizontal section) with 50 thick Celotex GA4050 rigid insulation with all joints metal taped followed with 12.5 plasterboard and set.

Where mono pitched roof abuts the cavity wall, install code 4 lead cavity tray and cover flashing.

Where mono pitched roof abuts the tile hanging, install code 4 lead flashing and dress down over the interlocking tiles.

White pvcu fascia boards, barge boards and soffit.

U value 0.16W/m²K

Entrance Door and Side Light Assembly – Purpose made white upvc framed double glazed door with side light as elevation and installed under IG L1/s 100 lintel.

Frame approximately 1200 wide.

Frame to be mastic sealed (all round internally) to the walls

Glass in door and side light to be toughened safety, Low-E (0.05 coating), with 16 air gap

Door & window to be 'Grade A to C' certified.

U value = 1.8 W/m²K

External Walls – To the ground floor section of wall, provide 100 painted brickwork to match existing 100 cavity filled with 100 Isowool Hi-Cav cavity batts as work proceeds, 100 Celcon Solar thermal blockwork .

To the first floor section of wall, provide plain tile hanging with colour to match existing on 25 x 38 treated softwood battens on 100 celcon solar blockwork to match existing, 100 cavity filled with 100 Isowool Hi-Cav cavity batts as work proceeds, 100 Celcon Solar thermal blockwork .

Clad walls with 12.5 plasterboard on dabs plus set coat internally.

Alternatively render and set walls

Walls tied together with stainless steel wall ties spaced 750 horizontally and 450 vertically but 225 vertically by door and window reveals.

Close cavities to door reveals incorporating Thermabate Caviclosers or similar

U value 0.28W/m²K

Stairway – Purpose made timber stairway with 18 risers (up 2 risers to a quarter space landing and then up 16 risers to first floor level) at approximately 170 rise, goings at 225 but minimum 50 to winders and a maximum 38 degree pitch.

Width 750 - 800 overall strings.

80 x 80 newl posts and 900 high handrail to stairway incorporating vertical balusters at 100 spacing.

2000 clear headroom over full going of stairs.

New Door to enter Ground Floor Lobby - Provide new E30 half hour fire resisting door in suitable frame.

The door to be fitted with intumescent smoke seals.

Note – E30 formerly FD30 standard.

Ground Floor – Covering to choice by client on 75 sand / cement screed on 500 gauge separating membrane on 100 Celcon GA4080 insulation on 1200 gauge polythene d.p.m. with all joints taped on 100 concrete on 150 clean hardcore.

P/A = 0.55

U value 0.22 W/m²K

Alternative Ground Floor – Covering to choice by client on 65 sand/cement screed on 500 gauge polythene separating membrane on 80 thick Celotex GA4080 rigid insulation with all joints metal taped on 1200 gauge polythene d.p.m.

100 Celcon floor blocks between concrete beams to be finished with on sand/cement slurry prior to installing the polythene d.p.m.

Underfloor voids, minimum 150 under floor joists, to be ventilated using 225 x 75 plastic air bricks at 1500 centres (or 500 sq mm per sq metre of floor) ducted through the cavity wall to the external air.

Manufacturers structural calculations for the beam and block floor to be submitted to and approved by Building Control prior to installation on site.

Supplier of the floor beams to provide a beam layout drawing.

P/A = 0.55

U value 0.22 W/m²K

Foundations – 600 wide x 600 thick concrete foundations to the new cavity walls and Depth to be comparable with the existing foundations and also suit the local ground conditions and any drainage.

Minimum depth of any foundation in clay should be 1200,

Electrics – Install electrics to clients requirements and Approved Document P.
All new electrical work is to be designed, installed, inspected and tested in accordance with BS 7671:2008 incorporating Amendment No 1:2011 or an equivalent standard.
The installation works are to be undertaken by a person registered with an electrical self certification scheme, or alternatively by a suitably qualified person, with a certificate of compliance produced by that person to Building Control upon completion of works.

Fire Alarm – Provide a break glass alarm call point at base of stairs.

Lighting – 75% of fixed light fittings to be fitted with energy efficient lighting consisting of compact fluorescent lamps having a luminous efficacy exceeding 45 lumens per circuit watt and total output of 400 lumens or LED lamps.

Any outside lights to be PIR controlled with a lamp of maximum 100 watts.

Note – Halogen lamps are not energy efficient

Heating – Extend existing hot water radiator circuit to cover new area.

Radiator sizes and check on the existing boiler for suitability to supply the additional loadings by heating engineer.

New radiators to be controlled by TRVs

Alternatively install electric wall mounted oil filled thermostatically controlled radiator.

Rainwater Water Drainage – 100 half round rainwater gutter fixed to fascia board and 65 diameter rainwater down pipe to a new underground drain to a (non filled) soakaway 5 metres from the building consisting of 6 in number plastic 'Polypipe Polystorm' light duty soakaway crates (1000 x 500 x 400 high) to make an open void of 1500 x 1000 x 800 high.

Notches in timber – any notches within the various joists should be no deeper than 0.125 times the depth of the joist and should not be cut closer to the support than 0.07 of the span, nor further away than 0.25 times the span.

Holes (where required) should not be of a greater diameter than 0.25 times the depth of the joist.

Holes should be drilled at the neutral axis and should not be less than three diameters (centre to centre) apart.

Holes should also be only located between 0.25 and 0.4 times the span from the support.

Insulation Generally – Insulation at junctions to be butted up together to prevent cold bridging.

Lintels Generally – IG or similar lintels to have the standard 150 end bearings.