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4.8 FIRST FLOOR: TIMBER JOISTED

4.8.1 DECKING: 22mm T. & G. flooring grade chipboard Type P5 or P7 in accordance with BS EN 312-5 Particleboards – Specifications. Load bearing boards for use in humid conditions & BS EN 312-7 Heavy duty load bearing boards for use in humid conditions respectively fixed strictly in accordance with manufacturers recommendations & in accordance with BS7916. Bathroom, WC, Kitchen & Utility room Areas to be moisture resistant boarding. Boarding to have minimum mass of 15kg/m2

Boards should not be laid until the building is watertight unless specific protection is provided, Board joints should be tightly pulled together before fixing and fixed along edge and intermediate supports with either screws or nails at board corners and at 300 mm centre's. Fixings should be not less than 8 mm from the board edges.

Nails should be improved/annular ring shank type. Nail length should be 2.5 times the board thickness and nail heads should be punched below the board surface. Unless power nailing is used, cement bonded particleboard should be pre-drilled before nailing.

All cut edges & perimeter of the floor to be fully supported on solid noggins. All end joints in timber flooring to occur directly over a floor joist. Provide H frame under all end joints occurring between joists, securely fixed to adjacent joists.

Tongued and grooved board joints should be glued with polyvinyl acetate (PVAC) glue or similar adhesive and the joints between the joists and the board should also be glued with PVAC to obviate possible creaking of the floor. An expansion gap of at least 2 mm (divided between each end) per metre run of deck, or not less than 10 mm should be allowed between the decking and the perimeter wall in each room area. On large floor areas, board manufacturers may recommend intermediate expansion gaps.

Where future access is required, eg by water authorities, purpose-designed screwed access panels should be provided.

4.8.2 JOISTS to be regularised general structural grade timber and shall be a minimum strength of C16 unless otherwise specified in accordance with section 4.1 tables 6 & 7 of TRADA span tables & in accordance with BS 52638-7-1:1989. sizes shown on layouts & at 400mm centres unless otherwise specified. Joists to be supported onto inner leaf of external walls with joist hangers, with lateral restraint of 30 x 5mm galvanised ms restraint straps at max 2000mm centres. strapping not required where joist hangers are of the restraint type hanger to bs5268 pt 1. joists at right angles to party walls to be either supported with proprietary hangers, or built into walls all in accordance with nhbc approval. a 25mm minimum gap is to be maintained to wall face where joists run parallel. joists to be doubled up under parallel non-load bearing partitions & within bathroom areas.

4.8.3 TRIMMERS either single section to size as indicated on working drawings, with proprietary hangers at junctions where applicable, or double joists bolted together with M16 bolts at 750mm centres with 64mm double sided toothed plate connectors. Ends to be strapped down to internal masonry with 30 x 5 straps 1200mm long bolted with min, 3No. M12 anchors or as Engineers requirements. With the exception of holding down bolts to steel beams and columns all masonry fixings shall be stainless steel

4.8.4 NOGGINS inserted at all edges where joists are at right angles to masonry for edge support to floor and ceiling finishes.

150 x 38 SW noggins to be fixed below SW partitions running at 90 degrees to joists.

4.8.5 STRUTTING: 150 x 38 (200mm deep joist) or 175 x 38 (225mm deep joist) SW solid strutting fixed, 1 row, mid span for joist spans of 2.5-4.5 metres, and 2 rows, at equal spacing over 4.5 metres span. Strutting shall be blocked to walls at ends. All in accordance with NHBC requirements 6.4.

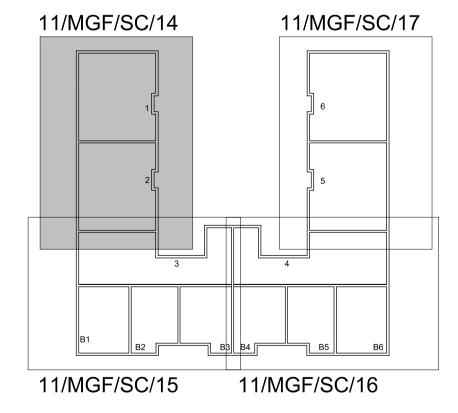
4.8.6 NOTCHING: All drilling of joists to accommodate services must be in accordance with Finnjoist requirements & recommendations, round hole distance chart & construction requirements for cutting & service installation together with NHBC requirements 6.4. Care should be taken to ensure neatness of cuts.

4.8.6.1 All notching and drilling of timber non engineered joists to accommodate services must be in accordance with NHBC requirements 6.4. Care should be taken to ensure neatness of cuts. Where, if unavoidable timber floor joists are notched to accommodate crossing pipe work (including heating pipe work) metal protection plates are to be sunk flush with the top of the joist and screwed to the top of the joists to bridge the notching.

4.8.7 LATERAL RESTRAINT: Joists running parallel to external walls to be restrained by 30 x 5 galvanised Ms. straps at MAX. 2000mm c/c fixed to 3 No. joists with solid blocking under and turned down 150mm into cavity. Solid blocking within floors to lateral restraint strap locations may be reduced in depth by 50mm where there are services. Adjacent noggins/packing should be to full depth of the joist.

4.8.8 ACOUSTIC INSULATION: Provide an absorbent layer of mineral wool, minimum density - 10kg/m3 minimum thickness 100mm laid in the cavity. Crown Acoustic Joist Roll, Crown Rocksilk Felxible slab or Rockwool Flexi in the cavity.

7.18.2STRUCTURAL BEAMS - All in accordance with Consulting Engineers Specifications and calculations and indicated on working drawings. All steelwork to be painted 1 coat zinc phosphate primer in the works. All dirt, grease, rust and loose mill scale must be removed prior to painting. After erection, all damaged areas of steelwork and site connections to receive a further coat of primer. Where galvanised the steel is to be hot dipped galvanised to BS 729



## Terence C. Burton MCIAT CHARTERED ARCHITECTURAL TECHNOLOGIST CONTRACT MONKS GREEN FARM, MONKS GREEN LANE

BRICKENDON, HERTS. SG13 8QL
DRAWING TITLE
FIRST FLOOR LAYOUT

UNITS R1 & R2

SCALE DATE

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