

TYPICAL SPECIFICATION.

FOUNDATIONS. (R.O.I.) .

Foundations to be excavated to a bearing stratum to the complete satisfaction of architect / engineer and to a depth of not less than 750 from finished ground level to the underside of strip. Foundations are the responsibility of the client and it is assumed that the design has taken into account ground conditions of the site. Foundations to be designed in accordance with Building Regulations Technical Guidance Document A.

FOUNDATIONS. (N.I.).

Foundations to be excavated to a bearing stratum to the complete satisfaction of the local building control office and to a depth of not less than 750 from finished ground level to the underside of strip. Foundations are the responsibility of the client and it is assumed that the design has taken into account ground conditions of the site. Foundation to be designed in accordance with Building Regulations Technical Booklet D.

GROUND FLOOR CONSTRUCTION.

Ground floor construction as per architects / engineers details. Client / Contractor responsible for ensuring adequate measures are taken to prevent the ingress of Radon Gas into the dwelling. These measures will be dependant on the geographic location of the site. All radon barriers, sumps etc to be installed in strict compliance with manufacturers details and specification.

EXTERNAL WALLS.

EXTERNAL CLADDING & CAVITY.

Brick or blockwork outer leaf to be constructed in accordance with recommendations of the material supplier with regard to coursing, bonding, contraction joints etc and comply with I.S. 325 / B.S.5628 on 50mm drained and vented cavity, on timber frame inner leaf. Cavity to be vented using proprietary perpend vents at max. 1.5m centres below dpc level (allowing for drainage in addition to ventilation) and at eaves and verge level. Brick/block outer leaf tied to timber frame using flexible wall ties nailed at stud positions. Wall ties to be tested to DD140 and be accompanied with an appropriate BBA Agreement Certificate. Wall ties to be spaced at centres according to test, based on wind pressure for the locality of the site. Refer to manufacturers technical guidance documents for this information.

TIMBER FRAME EXTERNAL WALL.

38 x 90 / 140 studs at 400 / 600 centres (or as otherwise specified by calculations based on B.S. 5268 Part 2) with factory fitted bottom plate, incorporating dpc, and top rail + header. Note: all timber in external walls to be preservative treated. Stud framing to be sheathed with 9.5mm OSB 3 sheathing (or other category 1 sheathing material to B.S. 5268 Section 6.1 Table 2), with 2.81mm dia x 51mm long nails at 150mm centres to perimeter studs and 300mm centres to inner members unless otherwise stated in structural calculations.

BREATHER MEMBRANE.

Proprietary breather membrane, Type 1 or 3 to BS 4016 to be fitted to sheathing with stainless steel staples at 300mm centres and be accompanied with an appropriate IAB or BBA Certificate. Allowance to be made for overlaps. ie. 100mm horizontally and 150mm centres vertically.

THERMAL INSULATION.

100mm / 150mm mineral wool insulation (glass or rock) fitted in all voids between stud framing, stapled to studs to hold in place. Insulation used must achieve required 'U' value as per building regulations as used with wall build up. Care to be taken to ensure all voids between studs is completely filled with insulation.

VAPOUR CONTROL LAYER.

Provide polythene vapour barrier (125 micron) fitted on site to warm side of insulation prior to fitting of wall lining. Polythene to be stapled to studs at 300mm centres. Vertical laps to occur at stud positions and horizontal laps to be taped and sealed. Note, virgin polythene to be used not recycled polythene.

CAVITY BARRIERS.

Provide vertical and horizontal cavity barriers around all openings and in accordance with current Building Regulations. Cavity barriers may be either of rigid or flexible type. Reference to be made to timber frame manufacturers details.

DAMP PROOF COURSES.

Provide DPC to underside of all ground floor walls (factory fitted) and to all window / door openings at jambs, heads and cills in accordance with manufacturers details.

NOTCHES AND HOLES.

Refer to I.S. 444 for details of notching - typically notches in structural timbers shall be no deeper than $\frac{1}{8}$ of the depth of a joist and shall not be cut closer to the support than 0.07 of the span nor further away than $\frac{1}{4}$ of the span and holes shall be no greater in diameter than $\frac{1}{4}$ of the depth of the joist shall be drilled at the neutral axis and shall be not less than 3 diameters (centre to centre) apart and shall be located between 0.25 and 0.4 times the span from the support

ROOF TRUSSES.

All roof trusses to be erected and braced in accordance with I.T.P.A. Technical Handbook and Design Code.

All trusses to be fitted with truss clips to prevent roof uplift. Truss design to determine grades and sizes in accordance with I.S. 193
Note truss profiles shown are diagrammatic only and exact position of webs etc determined by truss manufacturers design. Certificate for truss design to be provided where applicable prior to delivery to site.

PARTY WALLS. - TIMBER FRAME.

2 number panels 90 x 38 studs at 400-600mm centres with 70mm cavity between studs. 90mm glasswool/rock fibre (min 10Kg/m³) between studs to one leaf only. Room side of panel to be lined with 1 number layer of 19mm plasterboard on 1no layer 12.5mm plasterboard with separate vapour check continuing from external wall approx. 1200mm along party wall leaf. 600mm min ply bracing to panels at each end unless otherwise specified.. Ensure all firestopping is provided in accordance to manufacturers details. Services not permitted in timber frame party walls.

NOTE: Cavity within party wall to continue min 50mm belowFFL, however 215mm is preferred.

UPPER FLOORS.

18mm flooring grade plywood or other approved decking material on floor joists, typically 222 x 44 C16, or as specified in structural calculations and required centres.

All decking joints to be centred on joist or bridging. If OSB is being used ensure specified expansion gap is provided around perimeter.

Provide double joists or solid bridging under non load bearing walls. Load bearing walls supported in strict accordance with structural calculations.

All stair and chimney openings to be trimmed out as per structural calculations. Ensure that a minimum of 200mm between the joist and the flue cavity, where this can not be achieved ensure a min 40mm gap between the joist and the masonry face of the chimney.

BEAM GIRDER SUPPORT.

Where timber / steel beams (either downstand or within floor depth above) and girder trusses occur ensure min number of studs are provided under the point load as per structural engineers calculations.

OTHER ITEMS.

NOTE: All timber CLS strength class min C16 unless otherwise specified.
All fixing in accordance with Timber Frame Manufacturers nailing schedule.
Any variation in external finish as agreed between the client and the planning department and in accordance with Timber Frame Manufacturers standard details.

NOTE: Where thickness of b'work surrounding a flue is less than 200mm provide 40mm clear space between any structural timbers and face of chimney.

NOTE: No structural timbers to be cut otherwise, than in accordance with Timber Frame Manufacturers details.

INTERNAL WALLS.

Internal walls to be constructed using 38 x 90 studs at maximum 600mm centres (unless otherwise stated) and lined both sides using 12.5mm plasterboard. Wall linings used is dependant on fire resistance required.
Internal load bearing walls to be designed in accordance with B.S. 5268 Part 2 + Part 6.

PARTY WALLS. - BLOCK.

215mm solid block party wall plastered both sides. Note materials used to comply with Technical Guidance Document E, and Homebond manual in ROI and Technical Booklet G in NI.
Floor joists at right angles with party walls to be supported using joist hangers built into party wall. Joists / trusses running parallel to block party wall to be connected to party wall in accordance with Technical Guidance Document A in ROI and Technical Booklet D in NI. Party wall to be built up to underside of roof covering and fire stopped in accordance with Technical Guidance Document B in ROI and Technical Booklet E in NI. Note: also refer to Homebond Manual for party wall requirements.