

Building Regulations Specifications

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Project Details

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BUILDING REGULATIONS NOTES

Existing Building Grade II Listed.

THE EXTERNAL FABRIC OF THE BUILDING IS NOT AFFECTED BY THE WORKS<
OTHER THAN THE INSTALLATION OF A NEW FRONT DOOR & A NEW RETAIL SHOP FRONT
AS SHOWN ON THE DRAWINGS:

CONSULTATIONS WITH OTHER AUTHORITIES

The applicant is reminded of the need to consult with other departments such as Planning, Conservation, Environmental Health, Water Authorities, Private Sector Housing etc. Issues which may arise include:

Parking and cycling facilities
Conversion of listed buildings
Conversion in conservation areas
Crime prevention and security
Disabled access provision
Conversion to HMO and private sector housing requirement
Flat layout requirements
Room size requirements
Design statements
Other issues may also apply.

PARTY WALL ACT

Should they need to do so under the requirements of the Party Wall Act 1996, the owner has a duty to serve a Party Structure Notice on any adjoining owner if the building work involves any of the following to a Party Wall:

- Support of beam
- Insertion of DPC through wall
- Raising a wall or cutting off projections
- Demolition and rebuilding
- Underpinning
- Insertion of lead flashings

THERMAL BRIDGING

Care shall be taken to limit the occurrence of thermal bridging in the insulation layers caused by gaps within the thermal element, (i.e. around windows and door openings).

HEALTH AND SAFETY

The contractor is reminded of their liability to ensure due care, attention and consideration is given in regard to safe practice in compliance with the Health and Safety at Work Act 1974.

MATERIALS AND WORKMANSHIP

All works are to be carried out in a workmanlike manner. All materials and workmanship must comply with Regulation 7 of the Building Regulations, all relevant British Standards, European Standards, Agreement Certificates, Product Certification of Schemes (Kite Marks) etc. Products conforming to a European technical standard or harmonised European product should have a CE marking.

The latest edition of the British Standard (including any amendments) applies to any undated references within these specifications.

CDM REGULATIONS 2015

The client must abide by the Construction Design and Management Regulations 2015. The Client must appoint a Contractor, if more than one Contractor is to be involved, the Client will need to appoint (in writing) a Principal Designer (to plan, manage and coordinate the planning and design work), and a Principal Contractor (to plan, manage and coordinate the construction and ensure there are arrangements in place for managing and organising the project).

EXISTING STRUCTURE

Existing structure including foundations, floor, beams, walls, roof and lintels are to be exposed and checked for adequacy prior to commencement of work and as required by Building Control.

BEAMS AND STRUCTURE

Engineer's Structural calculations and details are to be provided for all beams, roof, lintels, joists, bearings, padstones and any other load bearing elements before works commence on site. New steel beams to be encased in 12.5mm Gyproc FireLine board with staggered joints, Gyproc FireCase or painted in Nullifire S or similar intumescent paint to provide 1/2 hour fire resistance, as agreed with Building Control. All fire protection to be installed as detailed by specialist manufacturer.

LINTELS

- For uniformly distributed loads and standard 2 storey domestic loadings only

Lintel widths are to be equal to wall thickness. All lintels over 750mm sized internal door openings to be 65mm deep pre-stressed concrete plank lintels. 150mm deep lintels are to be used for 900mm sized internal door openings. Lintels to have a minimum bearing of 150mm on each end. Any existing lintels carrying additional loads are to be exposed for inspection at commencement of work on site. All pre-stressed concrete lintels to be designed and manufactured in accordance with BS EN 1992-1-1:2023 Eurocode 2, with a concrete strength of 50 or 40 N/mm² and incorporating steel strands to BS 5896 to support loadings assessed to BS EN 845-2:2013.

For other structural openings provide proprietary insulated steel lintels suitable for spans and loadings in compliance with Approved Document A and lintel manufacturer's standard tables. Stop ends, DPC trays and weep holes to be provided above all externally located lintels.

Independent lintels to have an insulated cavity closure between the inner and outer lintel.

Unless only supporting a roof, lintels to be encased in 12.5mm Gyproc FireLine board with staggered joints, Gyproc FireCase or painted in Nullifire S or similar intumescent paint to provide 1/2 hour fire resistance. All fire protection to be installed as detailed by specialist manufacturer.

UPGRADE OF EXISTING FLOORS WITHIN FLAT (Please refer to Approved Document B Volume 2 Section 2.1 - multi-storey flats)

Joists to be 50mm minimum from chimney breasts (joist size to Structural Engineer's details and calculations). Provide min 20mm t and g chipboard or timber board flooring (in areas such as kitchens, utility rooms and bathrooms flooring to be moisture resistant grade in accordance with BS EN 312). Identification marking must be laid upper most to allow easy identification. To upgrade to half hour fire resistance and provide adequate sound insulation lay minimum 150mm Rockwool insulating material or equivalent on chicken wire between joists. Chicken wire to be fixed to the joists with nails or staples these should penetrate the joists side to a minimum depth of 20mm, in accordance with BRE-Digest 208. Joists spans over 2.5m to be strutted at mid span use 38 x 38mm

herringbone strutting or 38mm solid strutting (at least 2/3 of joist depth). Provide lateral restraint where joists run parallel to walls. Floors are to be strapped to walls with 1000mm x 30mm x 5mm galvanised mild steel straps or other approved in compliance with BS EN 845-1 at max 2.0m centres, straps to be taken across minimum 3 no. joists. Provide 38mm wide x $\frac{3}{4}$ depth solid noggins between joists at strap positions.

All work to be in accordance with BRE-Digest 208, first floor ceiling to be checked for suitability in accordance with guide, if found to be unsuitable, first floor ceiling to be over boarded with 12.5mm Fire-line board.

UPGRADE OF SOLID EXTERNAL WALL

To achieve min U-value 0.30 W/m²K

Existing wall to be exposed and checked for its suitability. Insulate existing wall on the inside using 62.5mm Kingspan Kooltherm K118 insulated dry lining board fixed to 25 x 50mm battens at 600mm centres to provide a nominal 25mm cavity between the masonry and insulation, (50mm cavity or vandex slurry to be provided, if required by building control).

Tape joints and seal perimeter edges with mastic, to provide a vapour control layer (VCL). Finish with a plaster skim.

All work to be in accordance with BS 8000-8:2023 Design and installation of dry lining systems.

COMMON STAIRS AND CORRIDORS

Common corridors and stairs should be protected, i.e. within a 30 minute fire resisting enclosure, and should lead directly to outside. Wall and ceiling surfaces are to have the appropriate linings to inhibit surface spread of flame in accordance with BS476.

Meters located within the stairway should be enclosed with a secure cupboard which is separated from the escape route with fire resisting construction. All gas services within a protected stairway must be installed in accordance with The Gas Safety (Installation and Use) Regulations 1998.

Escape routes to be provide minimum 2m headroom, to be adequately lit and exits are suitably signed in accordance BS ISO 3864-1 and BS 5499-4, as required.

Any cupboards to be constructed with half hour fire resistant construction with an FD30 fire door marked 'Fire door keep locked shut' in accordance with BS 5499-5.

STAIRS

Dimensions to be checked and measured on site prior to fabrication of stairs. Timber stairs to comply with BS585 and with Part K of the Building Regulations. Max rise 220mm, min going 220mm. Two risers plus one going should be between 550 and 700mm. Tapered treads to have going in centre of tread at least the same as the going on the straight. Min 50mm going of tapered treads measured at narrow end. Pitch not to exceed 42 degrees. The width and length of every landing should be at least as great as the smallest width of the flight. Doors which swing across a landing at the bottom of a flight should leave a clear space of at least 400mm across the full width of the flight. Cupboard doors may open across the top landing where the swing is a minimum of 400mm from the tread. Min 2.0m headroom measured vertically above pitch line of stairs and landings. Handrail on staircase to be 900mm above the pitchline, handrail to be at least one side if stairs are less than 1m wide and on both sides if they are wider. Ensure a clear width between handrails of minimum 600mm. Balustrading designed to be unclimbable and should contain no space through which a 100mm sphere could pass. Allow for all structure as designed by a Structural Engineer.

INTERNAL STUD PARTITIONS (within flat)

100mm x 50mm softwood treated timbers studs at 400mm ctrs with 50 x 100mm head and sole plates and solid intermediate horizontal noggins at 1/3 height or 450mm ctrs. Provide min10kg/m³ density acoustic soundproof quilt tightly packed (e.g. 100mm Rockwool or Isowool mineral fibre sound insulation) in all voids the full depth of the stud. Partitions built off doubled up joists where partitions run parallel or provide noggins where at right angles. Walls faced throughout with 12.5mm Gyproc FireLine board with skim plaster finish. Taped and jointed complete with beads and stops.

PIPES PASSING THROUGH SEPARATING WALLS

Provide adequate fire stopping where pipes pass through walls using proprietary systems including acoustic intumescent sealant, intumescent collars and fire sleeves to ensure the appropriate level of fire and sound resistance is maintained.

INSULATION AT CEILING LEVEL

To achieve U value of 0.16 W/m²K

Insulation at ceiling level to be 150mm XR4000 Celotex between ceiling joists with a further 25mm over joists. 18mm chipboard to be provided over insulation.

Construct ceiling using sw joists at 400mm centres, finished internally with 12.5mm plasterboard

and min 3mm thistle multi-finish plaster. Provide polythene vapour barrier between insulation and plasterboard. Provide opening at eaves level at least equal to continuous strip 25mm wide in two opposite sides to promote cross ventilation. Allow for all structure as designed by a Structural Engineer.

Loft hatches should be suitable designed and installed to ensure optimum air tightness.

MEANS OF ESCAPE - (Internal planning of flat)

All flats to be provided with a protected entrance hall (lobby) with half hour partitions between the hall and all rooms. Entrance hall to lead directly to a protected common hallway or lobby. The travel distance from the flat entrance door to the door of any habitable room not to be greater than 9m. Inner rooms are not acceptable.

All doors from rooms on to the entrance hall must be FD20 rated fire doors to BS 476 (fitted with intumescent strips rebated around sides & top of door or frame if required by Building Control). Where applicable, any glazing in fire doors to be half hour fire resisting and glazing in the walls forming the escape route enclosure to have 30 minutes fire resistance to at least 1.1m above the floor level.

Flat entrance door to be FD30 with a self-closer, 3 hinges (made from materials that have a minimum melting point of 800°C), intumescent strips and smoke seals and to have simple, easily and immediately openable locks, without the use of a key i.e. thumb-turn locks.

SMOKE DETECTION

Provide a linked smoke alarm detection system to BS EN 14604 and BS 5839-6:2019 to at least a Grade D2 category LD2 standard. System to be mains powered with battery back up. Smoke detectors to be provided to:

- Each hallway and landing
- Every principal living room (as required by Building Control)

An interlinked heat detector to be provided in the kitchen.

In hallways exceeding 7.5m in length, no point within the hallway should exceed 7.5m from the nearest detector and no bedroom door should be further than 3m from the nearest smoke alarm. If ceiling mounted detectors to be 300mm from the walls and light fittings.

SMOKE VENTILATION IN COMMON WAYS

Provide an automatic opening smoke vent with a geometric free area of at least 1.0m² located on an external wall at the top of the stair as high as practicable and so the top edge is at least as high as the top of the door. Vent to be opened on detection of smoke on any storey in the stair (vents to be placed on every level if required by Building Control).

EXTRACT TO BATHROOM

Bathroom to have mechanical vent ducted to external air to provide min 15 l/s extraction. Vent to be connected to light switch and to have 15 minute over run if no window in room. Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic ventilation compliance guide. Intermittent extract fans to BS EN 13141-4. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body.

EXTRACT TO KITCHEN

Kitchen to have mechanical ventilation with an extract rating of 60 l/s, or 30 l/s if adjacent to hob to external air. Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic Ventilation Compliance Guide. Intermittent extract fans to BS EN 13141-4. Cooker hoods to BS EN 13141-3. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body.

FOUL DRAINAGE

All existing foul water drainage to be tested for leakage, exposed for inspection (as required by Building Control) and repaired or replaced where necessary.

All new above ground drainage and plumbing to comply with BS EN 12056-2 for sanitary pipework. All drainage to be in accordance with Part H of the Building Regulations. Wastes to have 75mm deep anti-vac bottle traps and rodding eyes to be provided at changes of direction.

Where pipework passes through separating walls, pipes to be adequately fire stopped using proprietary intumescent fire stopping solutions, e.g. thermal pipe sleeves, intumescent expansion joint seals or intumescent pipe closers, installed in accordance with manufacturer's details.

Size of wastes pipes and max length of branch connections (if max length is exceeded then anti-vac

traps to be used).

Wash basin - 1.7m for 32mm pipe 3m for 40mm pipe.

Bath/shower - 3m for 40mm pipe 4m for 50mm pipe.

W/c - 6m for 100mm pipe for single WC.

All branch pipes to connect to 110mm soil and vent pipe terminating min 900mm above any openings within 3m.

Or to 110mm upvc soil pipe with accessible internal air admittance valve complying with BS EN 12380, placed at a height so that the outlet is above the trap of the highest fitting.

Waste pipes not to connect on to SVP within 200mm of the WC connection.

Supply hot and cold water to all fittings as appropriate.

SOUND PROTECTION AND TESTING

Separating walls, floors, stairs and party walls to achieve a performance standard of 43 dB (minimum values for airborne sound insulation) and 64 dB to floors and stairs (maximum values for impact sound insulation) to demonstrate compliance with Approved Document E1.

Pre completion sound testing to be carried out by a suitably qualified person with appropriate third party accreditation (either UKAS accreditation or be a member of the Association of Noise Consultants Registration Scheme). Test to be carried out once the dwelling is complete but before carpeting, and a copy of the test results given to Building Control.

If any elements were to fail the sound test, remedial works must be undertaken before retesting to the satisfaction of the Building Control Surveyor.

Where flanking walls or floors are continuous across separating walls specialist advice is to be sought to ensure additional treatments are provided to control flanking transmission.

IT IS THE DESIGNERS RESPONSIBILITY IS TO CONSULT WITH AN ACOUSTIC ENGINEER TO ENSURE THE COMPLIANCE ALL ASPECTS OF APPROVED DOCUMENT E.

ELECTRIC SPACE HEATING SYSTEMS

Each room to be provided with thermostatic room controls capable of being used to separately to adapt the heating output in each room served by the heating appliance.

Electrical heating system to be installed and commissioned by a member of one of the approved Competent Person Schemes. A copy of the commissioning certificate to be given to Building Control and the owner on completion of the works.

Any electric storage heaters to be provided with automatic control of input charge. The rate of heat release from the appliance to be adjustable, using an adjustable damper or other thermostatically controlled method.

Any electric panel heaters to be provided with time and temperature control to allow separate control for either of the following:

Each room, or

Each appliance, where this meets the guidance for thermostatic room controls in Approved Document L para 5.20

Any electric warm air system to be provided with:

A programmable room thermostat or a time switch and room thermostat, and

Separately controllable heating zones that meet the guidance for thermostatic room control in Approved Document L para 5.20 to 5.22.

COLD WATER SUPPLY

There must be a suitable installation for the provision of a wholesome water supply in accordance with Approved Document G. Cold water supply to be provided to washbasins, bidets, baths, WCs, showers, any place where drinking water is drawn off and to any sink provided in areas where food is prepared.

Supply of cold water to comply with section 67 of the Water Industry Act 1991 and the Water Supply (Water Quality) Regulations 2016.

HOT WATER SUPPLY

All bathrooms, washbasins, bidet, baths and showers to be provided with adequate hot and cold water supply in accordance with Approved Document G3. A washbasin with wholesome hot and cold water supply to be provided in or adjacent to all rooms containing a WC. A sink with hot and cold water also to be provided to any area where food is being prepared.

SOLID WASTE STORAGE (REFUSE)

PLEASE REFER TO PLANS FOR THE LOCATION OF REFUSE / RECYCLING COLLECTION POINTS.

IE ONE WITHIN EACH APARTMENT & ALSO WITHIN THE BASEMENT FOR RETAIL WASTE:

DAILY PRIVATE COLLECTION TO BE AGREED WITH READING BOROUGH COUNCIL.