

The Building Regulations

Profession & Business 1

Level 5

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Office of the
Deputy Prime Minister
Creating sustainable communities

The Building Regulations 2000

Conservation of fuel and power

APPROVED
DOCUMENT

L1A

L1A Conservation of fuel and power
in new dwellings

Coming into effect 6 April 2006

2006 edition

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Conservation of fuel and power

L1B

Conservation of fuel and power

2006 edition

Conservation of fuel and power

L2A

Conservation of fuel and power
other than dwellings

2006 edition

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The Building Regulations 2000

Conservation of fuel and power

L2B

L2B Conservation of fuel and power
in buildings other than dwellings

Coming into effect 6 April 2006

2006 edition

The Building Regulations

- **The UK's Building regulations** are statutory instruments that seek to ensure that the policies set out in the relevant legislation are carried out.
- Building regulations approval is required for most building work in the UK. Building regulations that apply across England and Wales are set out in the Building Act 1984 while those that apply across Scotland are set out in the Building (Scotland) Act 2003.
- The Welsh Government have made some minor changes to the legislation with a full amendment to follow.

The detailed requirements of Building regulations in England (and Wales) are scheduled within 16 separate headings, each designated by a letter (Part A to Part Q), and covering aspects such as workmanship, adequate materials, structure, waterproofing & weatherisation, fire safety & means of escape, sound isolation, ventilation, safe (potable) water, protection from falling, drainage, sanitary facilities, accessible access & facilities for the disabled, electrical safety, security of a building, high speed broadband infrastructure, and so on.

Part A: Structure



Part A: Structure

- This Part requires buildings to be designed, constructed and altered so as to be structurally safe and robust, and also so as not to impair the structural stability of other buildings.
- It stipulates design standards that should be adopted for use on all buildings and additionally gives simple design rules for most masonry and timber elements for traditional domestic buildings.
- The weight of the building from the walls, furniture and people in the building will be transmitted to the ground, so as not to cause instability to the building or other buildings.
- Requires buildings to be built in a way ensuring no collapse will occur disproportionately to its cause.
- Ground movement such as freezing of subsoil will not impair the stability of the building.

Part B: Fire safety



Part B: Fire Safety

The building regulations consider five aspects of fire safety in the construction of buildings:

- **Requirement B1** - Means of early warning of fire and adequate means of escape from the building (including emergency lighting and fire exit signage).
- **Requirement B2** - Control of Internally fire spread (linings)
- **Requirement B3** - Control of Internal fire spread (structure) will be maintained during a fire, and fire spread will be prevented.
- **Requirement B4** External fire spread – The external walls and roof will resist spread of fire to walls and roofs *of other buildings*.
- **Requirement B5** The building will be accessible for firefighters and their equipment, without delay.

Part B: Fire safety - Alternative Means to comply

- Using **BS9999 : 2008** for non-residential buildings
- Using **BS9991 : 2015** for dwellings and other residential buildings
- The use of a **Fire Engineer** to computer model the building layout and smoke behaviour in such a building.
- ***Building Regulation 38***

This requires the designer and/or constructor to give the fire safety information (for a description of the information required – see Appendix G of approved document B) to the Responsible Person, upon completion. This is to enable a competent person to carry out a fire risk assessment.

Other fire laws (England & Wales and Scotland)

Once a building is occupied the **Fire Safety Order 2005** requires a Fire Risk Assessment to be carried out, to take into account how the users are actually using the building (and any fire risks that brings to the building)

*The **Fire Safety Order 2005** is criminal law, and breaches of this law can result in the "Responsible Person" being jailed for up to two years and fined up to £10,000 for each offence. Corporate offences may have unlimited fines.*

Enforcement is by the local fire authority. It may be necessary to exceed the recommendations of the guidance supporting Part B of Schedule 1 to Building Regulations, in order to achieve a suitable and sufficient level of fire safety required under the Fire Safety Order 2005.

Part C. Site preparation and resistance to contaminants and moisture



Part C. Site preparation and resistance to contaminants and moisture

- Nothing should be growing on the ground covered by the building.
- Precautions must be taken to stop gases and dangerous substances from previous land use from entering the building and endangering the health and safety of occupants.
- Subsoil drainage will be in place, if needed, to stop the passage of ground moisture to the interior of the building and to prevent damage to the fabric of the building.
- The walls, floors and roof of the building shall prevent moisture passing to the inside of the building.
- The building must have provision to prevent condensation occurring in the roof structure.

Part D. Toxic substances



Part D. Toxic substances

- Some Insulating Materials inserted into (existing) cavity walls can give off toxic fumes. Preventative measures must be taken to stop these fumes reaching occupants of the building. However now largely obsolete as injected materials are now mostly blown chopped fiber and not mixed on-site "chemical reaction" based methods.
- See **Part C** for controls on toxic hazards from *ground contaminants* and/or *brownfield* development.

Part E. Resistance to the passage of sound



Part E. Resistance to the passage of sound

Separating floors and walls *between domestic dwellings* are required to meet a minimum sound insulation performance standard. This applies to both new 'purpose built' and converted 'material change of use' properties.

- Purpose built – the sound insulation value for each individual airborne test should be equal to or greater than 45 dB DnTw+Ctr. Each individual impact test should be equal to or less than 62 dB LnTw.
- Material change of use – the sound insulation value for each individual airborne test should be equal to or greater than 43 dB DnTw+Ctr. Each individual impact test should be equal to or less than 64 dB LnTw.

Part E. Resistance to the passage of sound

New internal walls and floors within dwelling-houses, flats and rooms for residential purposes, whether purpose built or formed by material change of use should achieve a minimum performance of R_w 40 dB when tested in a laboratory. Test data is to be taken from a UKAS (United Kingdom Accreditation Service) accredited laboratory.

Pre-completion sound tests have been required since July 2003 to ensure compliance with Approved Document E, unless the **Robust Details** approach is adopted.

Part F. Ventilation



Part F. Ventilation

Standards for ventilation and air quality requirements for all buildings are included in this part of the building regulations

The Building Regulations consider three ventilation types:

- Whole building
- Local extract
- Purge

Ventilation, Whole Building

- "Whole building" (formerly referred to as "background") ventilation to provide fresh air to dilute and disperse low levels of water vapour and other pollutants, usually by the provision of background ventilators or mechanical supply ventilation.



Ventilation, Local Extract

"Local extract" (formerly referred to as "extract") ventilation in rooms where most water vapour or concentrated pollutants are released, usually by mechanical means such as extract fans.



Ventilation, Purge.



"Purge" (formerly referred to as "rapid") ventilation for the rapid dilution and removal of high concentrations of pollutants from occasional activities, usually by opening windows. The requirements for purge ventilation are set out in Appendix B of Part F1.

Part G. Sanitation, hygiene and water efficiency



Part G. Sanitation, hygiene and water efficiency

- Adequate sanitation facilities i.e. toilet.
- A house must have either a bath or shower with the ability to heat hot water.
- Unvented hot water storage systems – restrictions apply to who can install the system.

Part H. Drainage and waste disposal



Part H. Drainage and waste disposal

- An adequate system to carry water used for cooking, washing, toilet, bath or shower to a sewer, cesspool or settlement tank must be in place.
- A cesspool or settlement tank must be impermeable to liquids and have adequate ventilation. It must also have means of access for emptying, not harm the health of any person and not contaminate water or water supply.
- An adequate system to carry rainwater away from the roof of a building e.g. guttering carrying water to a sewer.
- A place to put a wheelie bin or dustbin. The place must not harm anyone's health.

Part J. Combustion appliances and fuel storage systems



Part J. Combustion appliances and fuel storage systems

- Must have an adequate air supply for combustion and for efficient working of a flue pipe or chimney.
- Appliances shall discharge the products of combustion to the outside.
- The appliance, fireplace and chimney shall reduce the risk of the building catching fire.

Part K. Protection from falling, collision and impact



Part K. Protection from falling, collision and impact

Part K sets minimum standards for the safety of stairways, ramps and ladders, together with requirements for balustrading, windows, and vehicle barriers to prevent falling from floor edges, etc.

Glass and glazing safety is also covered. Also included are requirements for guarding where there is a risk of falling, pedestrian and vehicle barriers, and requirements to prevent injury from (opening) doors and windows.

Glazing that people come into contact with whilst in a building, should, if broken, break in a way unlikely to cause injury, resist impact without breaking or be shielded or protected from impact.

Buildings, other than dwellings that have transparent glazing which people come into contact with while moving around a building, must have features to make it apparent.

Windows that can be opened must be operated safely and provision made for safe accessible cleaning.

Part K also includes safety requirements relating to the use, operation, and cleaning of windows

Part K also includes safety requirements for automatic doors, barriers, shutters and gates.

Part L. Conservation of fuel and power



Part L. Conservation of fuel and power

Approved documents **L1** is specific to dwellings and **L2** relates to all buildings other than dwellings.

As of 6 April 2006 (2010) (2014) split into four sections:

- L1A New dwellings
- L1B Existing dwellings
- L2A New buildings other than dwellings
- L2B Existing buildings other than dwellings

Part L. Conservation of fuel and power

- Part L controls:
- insulation values of building elements
- The allowable area of windows, doors and other openings
- Air permeability of the structure
- The heating efficiency of boilers and the insulation and controls for heating appliances and systems together with hot water storage and lighting efficiency.
- It also sets out the requirements for SAP (Standard Assessment Procedure) calculations and carbon emission targets for dwellings.

Part M. Access to and use of buildings



Part M. Access to and use of buildings

Part M requires the inclusive provision of ease of access to and circulation within all buildings, together with requirements for facilities for disabled people.

Buildings should have reasonable provision:

- For all people to gain access and use the building.
- Toilets provision shall be made available for all.
- If a building has seating such as audience or spectator seating, reasonable provision should be made for people with disabilities.

Part M. Access to and use of buildings

The **Equality Act 2010** imposed duties on service providers, schools and public bodies in relation to access for people with disabilities. However, the Part M approved document is not written as a means of ensuring compliance with these legal duties. It is written to ensure that the design of a building does not create physical barriers to a building's inclusive use, over its lifetime.

Part M of the Building Regulations relates to the 'Access to and Use of Buildings' and draws largely on the legislation covered by the **Disability Discrimination Act 1995** and the **Disability Discrimination (Employment) Regulations 1996**.

Part N. Glazing – safety in relation to impact, opening and cleaning

Part N was Repealed in 2013 and these measures were moved into a new consolidated Part K in 2013



Part P. Electrical safety – dwellings



Part P. Electrical safety – dwellings

- Reasonable provision shall be made in the design, installation, inspection and testing of electrical installations in order to protect persons from fire or injury.
- Sufficient information shall be provided so that persons wishing to operate, maintain or alter an electrical installation can do so with reasonable safety.

Part Q. Security



Part Q. Security

In 2015 a new requirement, Part Q, came into force.

Part Q talks about security in a dwelling with reasonable provisions needing to have been made to resist unauthorised access to; any dwelling or any part of a building from which access can be gained to a flat within the building.

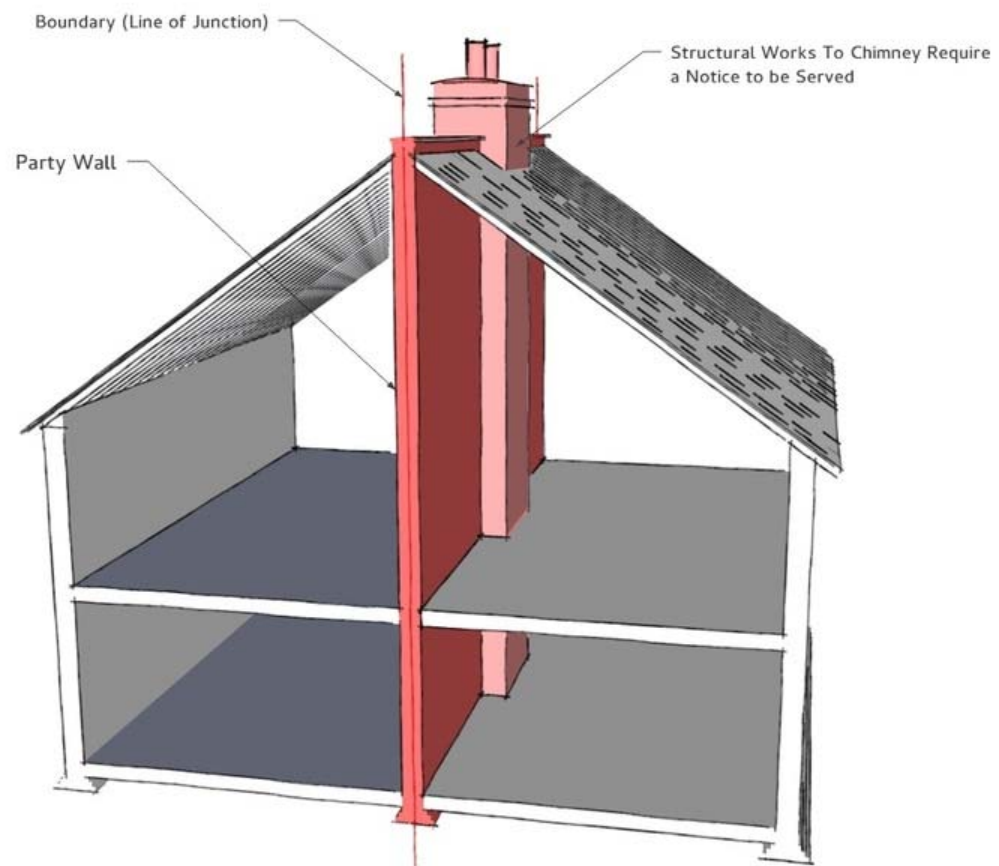
Part R: Electronic communications



Part R: Electronic communications

This Approved Document introduces a new requirement for in-building physical infrastructure which enables copper or fibre-optic cables or wireless devices capable of delivering broadband speeds greater than 30 Mbps to be installed.

Party Wall etc Ac 1996



Party Wall etc Ac 1996

- The Party Wall etc Act 1996 provides a framework for preventing and resolving disputes in relation to party walls, boundary walls and excavations near neighbouring buildings.
- A building owner proposing to start work covered by the Act must give adjoining owners notice of their intentions in the way set down in the Act. Adjoining owners can agree or disagree with what is proposed. Where they disagree, the Act provides a mechanism for resolving disputes.
- The Act is separate from obtaining planning permission or building regulations approval.

Buildings Exempt from the Building Regulations

Exempt buildings include:

- CLASS I Buildings controlled under other legislation e.g. Any building in which explosives are manufactured or stored under a licence granted under the Manufacture and Storage of Explosives Regulations 2005 or nuclear-related buildings or an ancient monument.
- CLASS II Buildings not frequented by people.
- CLASS III Greenhouses and agricultural buildings
- CLASS IV Temporary buildings (erected for less than 28 days).
- CLASS V Ancillary buildings.
- CLASS VI Small detached buildings (garages, garden storage sheds/huts) (less than 30 square metres floor area with no sleeping accommodation therein).
- CLASS VII Extensions – porches, covered ways, conservatories, (less than 30 square metres floor area).

Building Regulations Applications

Full Plans

- By the "full plans" method where drawings are deposited with the Local Authority and are subsequently checked for compliance with the Building Regulations.
- The various stages of the work are also inspected and checked for compliance with the relevant technical requirements of the Building Regulations; by a Building Control Surveyor employed by the Local Authority.
- This is the most thorough option. And a response from the Local Authority will typically take 4–8 weeks. However, unlike planning permission, work may start before approval has been granted. It is also quite usual for the final building to differ in some respects to that which received full plans approval, in which case amended "as built" plans are often required to be submitted to the Local Authority. A "completion certificate" is issued upon completion, as long as the completed work complies with the Building Regulations.

Building Regulations Applications

Building Notice

- By the "building notice" method where notice of commencement of (minor) building work is given to the Local Authority at least two days prior to commencement of work. The various stages of the work are then inspected and approved by the Local Authority but no plans are checked.
- This method may not be used if the premises contain a workplace, or creates new flats.

Building Regulations Applications

Regularisation

- This is the retrospective approval for work already carried out without consent - and can only be administered by a Local Authority.
- Most commonly, it is used by the owner of a building to apply for retrospective approval for illegal building work. The Local Authority will assess, and verify by means of site visits, plans and information submitted, identify non-compliant items, open up and inspect works, monitor the making good of defective work and, if satisfied, issue a Certificate.
- An application for a Regularisation Certificate does not prevent the Authority taking legal action for failure to comply with the Building Regulations when the work was first carried out.