

Title of the measure:	UK28_Building Regulations (2010)
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General description

For future changes to the Building Regulations see UK32_Building Regulations 2014 and UK33_Building Regulations 2016: The document only contains information on changes that came into force in 2010, not the changes for 2014 onwards. For changes that occurred in the past, see UK19_Building Regulations 2006.

The Department of Communities and Local Government (CLG) is responsible for making changes to the Building Regulations. They have a role to set objectives and fair building standards; publish statutory guidance on the way to meet the Building Regulations; overseeing the functioning of the building control system and statutory appeals system; and supporting the building control service and others who use the system to ensure compliance.

The new consolidation Building Regulations came into force on the 1st October 2010. This included revisions to Part G of the Building Regulations (sanitation, hot water and water efficiency) which came into effect on 6th April 2010 and revisions to Part F (ventilation), Part J (heat producing appliances) and Part L (conservation of fuel and power) which came into effect from October.

The Approval Documents are available for each Part of the Building Regulations at <http://www.planningportal.gov.uk/buildingregulations/approveddocuments/>

In 2010, Part L (Conservation of Fuel and Power) of Building Regulations in England and Wales¹ were amended to improve energy efficiency standards for new homes by 25% and energy efficiency standards for new non-domestic buildings by an average of 25% across the build mix. The revisions also strengthen the energy efficiency standards required when work is carried out to existing properties (e.g. replacement boiler standards raised from B to A rated).

Specific amendments to Part L for new domestic dwellings (new) and existing domestic dwellings (existing) include:

- The need for CO₂ emission rate calculations to be carried out and given to the Building Control Body before the start of building work on the erection of a new build, as well as after (new)
- The exemptions for extensions, conservatories and porches have been tightened (new and existing) and guidance has been provided for cases where the extensions, conservatories and porches are not exempt from energy efficiency requirements
- The annual CO₂ emission rate of the completed dwelling is now calculated using SAP2009 and must not exceed the target set by reference to a notional dwelling with an additional overall improvement of 25% relative to 2006 standards. This is in addition to treating party walls between connected dwellings against heat loss. (new)
- Some of the limits for building fabric and services performance specifications have been strengthened. (new)
- Revised guidance is provided for avoiding thermal bridging at construction joints including the option of adopting a quality assured accredited construction details scheme approach.
- New provisions were introduced for limiting heat loss from swimming pools where these are constructed as part of a new dwelling. (new and existing)
- There is guidance for presenting evidence that demonstrates compliance with the energy efficiency requirements and key features are highlighted that are critical in achieving the annual CO₂ emission rate target. (new)
- Thermal insulation in a roof space or loft space no longer needs to be notified to building control where this is the only work carried out and it is not carried out to comply with the Building Regulations (existing)

¹ responsibility for Building Regulations in Wales is scheduled to transfer to the Welsh Assembly Government at the end of 2011

- The main technical changes comprise a general strengthening of energy efficiency standard that are considered reasonable for work on thermal elements, control fittings and controlled services in existing buildings (existing)
- Guidance is provided for historic and traditional buildings that might be except from energy efficiency requirements (existing)
- Guidance has been expanded for renovation of a thermal element through the provision of a new layer or through the replacement of an existing layer (existing)

To view in full refer to 'Approval Document L1A: Conservation of fuel and power (New dwellings (2010)' and 'Approval Document L1A: Conservation of fuel and power (Existing dwellings (2010)'
http://www.planningportal.gov.uk/uploads/br/BR_PDF_ADL1A_2010.pdf (new build)
http://www.planningportal.gov.uk/uploads/br/BR_PDF_ADL1B_2010.pdf (existing buildings)

Three compliance guides were published:

Domestic Building Services Compliance Guide (2010)

http://www.planningportal.gov.uk/uploads/br/domestic_building_compliance_guide_2010.pdf

Domestic Ventilation Compliance Guide (2010)

http://www.planningportal.gov.uk/uploads/br/domestic_ventilation_compliance_guide_2010.pdf

Non-domestic Building Services Compliance Guide (2010)

http://www.planningportal.gov.uk/uploads/br/non-domestic_building_compliance_guide_2010.pdf

The Government made further changes to Part L in 2013 (see UK32_Building Regulations 2014).

Impact evaluation (methods and results)

Methods

Every two years an assessment is made on progress over the previous target period. The energy savings from Building Regulations in the household sector are calculated according to supplementary Green Book policy appraisal guidelines available at http://www.hm-treasury.gov.uk/data_greenbook_index.htm

Results

The DECC Updated energy and emissions projections 2013 (published in Sep 2013) provides estimates of the impact of the Buildings Regulations 2010:

Ex-post evaluation	2010	2016	2020
CO ₂ (kt)			
Energy (TWh)			
Ex-ante evaluation	2010	2016	2020
CO ₂ (Kt CO ₂ e/year)	0	2154	3421
Energy (PJ)*	0	40.6	63.9

* Energy figures converted from carbon by using same energy/carbon ratio as in progress report on UK NEEAP 2007 (published in July 2011) for Building Regulations in the household sector

The NEEAP 2014 does not provide a breakdown of the projected savings from Building Regulations according to the different phases of Building Regulations (2006, 2010, 2014) but a total figure for domestic and non-domestic dwellings.

Ex-post evaluation	2010	2016	2020
CO ₂ (kt)			
Energy (TWh)			
Ex-ante evaluation	2010	2016	2020
CO ₂ (Kt CO ₂ e/year)	0	domestic: 2695 non-domestic: 1358 Total: 4053	domestic: 6282 non-domestic: 3019 Total: 9300
Energy (PJ)*	0	domestic: 50.8 non-domestic: 25.6 Total:76.4	domestic: 118.4 non-domestic: 56.9 Total: 175.3

* Carbon figures converted from energy by using same energy/carbon ratio as in progress report on UK NEEAP 2007 (published in July 2011) for Building Regulations in the household sector

Note that the NEEAP 2014 states that the figures for Building Regulations differ from the September 2013 projections mentioned above because ‘the demand equations in the model underpinning the baseline projections are based on historic energy consumption data, the impact of progressive tightening of building regulations in the period 1970-2000 has a dampening effect on projections of energy demand post-2000. Published emission projection estimates of policy savings strip this effect out, which understates the expected future impact of building regulations when policy savings are assessed relative to the NEEAP baseline. This effect therefore has been added back into the policy savings for the purpose of this analysis.’ (NEEAP 2014, page 129)

Measure Impact Level

low medium high

Note: High for Building Regulations for all years and all sectors

Definition of the qualitative impact level

- The categories (low, medium, high) are linked to the aggregate electricity or energy consumption of the respective sector (households, transport, industry or tertiary), and not to a particular end-use, because the aggregation of the impacts is easier.
- The following limits (in each case in % of the overall final energy or electricity consumption of the sector; in case of fuel substitution and CHP: of primary energy consumption) are defined for the three impact levels:
- **low impact: <0.1%**
- **medium impact: 0.1-<0.5%**
- **high impact: ≥0.5%.**

Interaction of measures

There is some interactions with the Building Regulations 2006 and the estimates in the Results section do not separate out the effect of these regulations, for further information see UK19_Building Regulations (2006).

There might be some interactions with energy efficiency policies in the household sector such as:

- UK29_Supplier Obligations - Community Energy Savings Programme (CESP)
- UK 5_Warm Front and Fuel Poverty Programmes
- UK 20_Supplier Obligations - Carbon Emissions Reduction Target (CERT)

There is an overlap with UK13_Market Transformation Programme, where a minimum standard for boilers and air conditioning is mandated under the Ecodesign Directive and implemented through this measure and others in the UK.

Historical data

See UK19_Building Regulations (2006)

References

2014 UK National Energy Efficiency Action Plan

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2007 UK Energy Efficiency Action Plan

http://ec.europa.eu/energy/demand/legislation/doc/neeap/uk_en.pdf

Annual energy savings estimate from:

2014 UK National Energy Efficiency Action Plan

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Updated energy and emissions projections 2013

<https://www.gov.uk/government/publications/updated-energy-and-emissions-projections-2013>

UK Report on Articles 4 and 14 of the EU End-use Efficiency and Energy Services Directive (ESD)

Update on progress against the 2007 UK National Energy Efficiency Action Plan (July 2011)

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/48144/2289-uk-report-eu-enduse-esd.pdf

Green Book policy appraisal guidelines http://www.hm-treasury.gov.uk/data_greenbook_index.htm

Building Regulations

<http://www.communities.gov.uk/planningandbuilding/buildingregulations/>

Approval documents for each Part of the Building Regulations

<http://www.planningportal.gov.uk/buildingregulations/approveddocuments/>

Domestic Building Services Compliance Guide (2010)

http://www.planningportal.gov.uk/uploads/br/domestic_building_compliance_guide_2010.pdf

Domestic Ventilation Compliance Guide (2010)

http://www.planningportal.gov.uk/uploads/br/domestic_ventilation_compliance_guide_2010.pdf

Non-domestic Building Services Compliance Guide (2010)

http://www.planningportal.gov.uk/uploads/br/non-domestic_building_compliance_guide_2010.pdf

The Building and Approved Inspectors (Amendment) Regulations 2010

<http://www.legislation.gov.uk/uksi/2010/719/contents/made>

Climate Change and Sustainable Energy Act 2006

<http://www.legislation.gov.uk/ukpga/2006/19/contents>