

Title of Measure	SPA36 “Technical Building Code”
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General Description

The Technical Building Code, hereinafter referred to as TBC, promulgated by Royal Decree 314/2006, 17 March 2006, is the regulatory framework governing the basic quality requirements that must be met by buildings, including their installations, in order to comply with the basic safety and habitability regulations defined by Law 38/1999, 5 November 1999, on the Organization of building construction, (known by the Spanish acronym LOE).

The TBC shall apply to new construction works, except for technically simple structures of negligible constructional consequence not designated for residential or public use. At the same time, the TBC shall apply to extension, modification, alteration or renovation works that are carried out on existing buildings.

The Technical Code includes a set of **Basic Documents, BD**, for complying with the basic requirements of the TBC. These documents shall be updated in accordance with technical advancements and social requirements and shall be approved regularly. The BD stipulates said basic requirements for structural safety, fire safety, safe use, health, hygiene and environmental protection, protection against noise, and energy saving and thermal insulation, and provides procedures for accrediting compliance with sufficient technical guarantees. They may also contain indications or references to instructions, regulations, or other technical standards for the specification and inspection of materials, test methods and calculation data or processes that will have to be taken into account in drawing up the plan of the building and its construction.

Among the mentioned BD, it must be highlighted the **Basic Energy Saving Document** which aim is to obtain a rational use of the energy required for *buildings*, reducing their consumption to sustainable limits, and thereby ensuring that part of this consumption comes from renewable sources of energy, thanks to their *design, construction, use* and *maintenance* characteristics. The IDAE took part in its drafting and editing, acting as an advisor to the Ministry of Housing. This Basic Document comprises the following sections:

- HE.1: Limiting energy demand (heating and air conditioning).
- HE.2: Efficiency of heating/air-conditioning systems.
- HE.3: Energy efficiency of lighting systems.
- HE.4: Minimum solar contribution to the hot water supply.
- HE.5: Minimum photovoltaic contribution to the electrical power supply.

By way of supplement to the Basic Documents, **Recognised Documents** of the TBC shall be created, defined as non-regulatory technical documents recognised by the Ministry of Housing, which shall keep a register thereof. Recognised Documents may contain the following: Technical specifications and guides or codes of good practice that include procedures for the design, calculation, maintenance and upkeep of products, elements, and construction systems; Evaluation methods and construction solutions, computer programmes, statistical data on the accident rate in construction and other basic data; or any other document that facilitates the application of the TBC, excluding those that refer to the use of a particular or patented construction product or system.

In a complementary way, it was also created the **Council for Sustainability, Innovation and Quality in Building**, which is reported by the Commission for the Technical Building Code on all matters concerning assistance and advice for its application, implementation and updating.

The update of the **CTE DB-HE Basic Document on energy saving** took recently place through Order FOM/1635/2013, pursuant to the provisions of Directive 2010/31/EU of the European Parliament and of the Council, of 19 May 2010, on energy efficiency in buildings, amending Directive 2002/91/EC. This involves an increase in energy efficiency and in renewable energies different from the ones mentioned in the above Basic Document, and it also introduces a new section: HE.0: limitation of energy consumption. The *energy*

consumption of buildings is limited according to the *climate area* where it is located and to the envisaged use for it. The energy consumption for the fitting-out, if applicable, of buildings or parts of them which, given that they are permanently open for reason of their use, will exclusively be met with energy coming from renewable energies. These demands shall be checked using a calculation procedure pursuant to the specifications established to the purpose.

All the above leads to the partial transposition of Directive 2010/31/EU into the Spanish legal system in terms of the energy efficiency requirements in buildings, as provided in its articles 3, 4, 5, 6 & 7, as well as Directive 2009/28/EC, in terms of a demand of some minimum energy levels coming from renewable energies in buildings, as set forth in its article 13. In like manner, the updating of the DB-HE Basic Document on energy saving makes up a first approach to the objective of Directive 2010/31/EU of achieving nearly zero-energy buildings – before 31 December 2010 in all new buildings and before the end of 2018 in new buildings for public use.

Impacts Assessment (methods and results)

The approval of the TBC, focused on the buildings sector, is expected to have a high impact. Its implementation not only will contribute to the development of the Spanish heating market but also to support policies for solar thermal and other renewable energy technologies in the heating and cooling sector.

Measure Impact level		
<input type="checkbox"/> low	<input type="checkbox"/> medium	<input checked="" type="checkbox"/> high

Interaction of measures

- Action Plan 2011-2020: Improvement of energy efficiency of the thermal installations in existing buildings (SPA31)
- Action Plan 2011-2020: : Improvement of energy efficiency of the indoor lighting installations in existing buildings (SPA32)
- Action Plan 2011-2020: Construction of new buildings and rehabilitation of the existing ones with high energy qualification (SPA33)
- Action Plan 2011-2020: Construction or rehabilitation of nearly-zero energy buildings (SPA39)
- CER (Energy Performance Certificate for Buildings) (SPA41)
- Revised” Regulation of Thermal Installations in Buildings” (SPA37)
- Law on Sustainable Economy (SPA14)

Historical data

Law 38/1999 on Town Planning and Development (LOE) set forth - as some of its basic building requirements - that buildings should be devised in such way that the environment is not damaged, and that a rational use of the necessary energy is made in the building through energy saving and thermal insulation. Later on and through Royal Decree 314/2006 of 17 March was approved the Building Technical Code (CTE), which was defined as the regulatory framework of basic quality standards in buildings and their installations; the latter allow verifying the compliance with the said basic requirements, one of which is energy saving. Moreover, Law 38/1999 obliges to a periodical updating in compliance with technical evolution and society’s demand. Thanks to the Royal Decree above, the demands relating to the energy efficiency requirements in buildings of Directive 2002/91/EC are partially transposed into the Spanish legal system. It also sets forth the obligation to periodically revise the said requirements and update them, if necessary, with a view to adapting them to the technical breakthroughs in the building sector.

In like manner, Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources lays down it is compulsory to demand the use some minimum energy levels from renewable sources in these building regulations and codes or in whatever form yielding equivalent effects; and if applicable, in the existing buildings that may be subject to a significant renovation. Later on, Directive 2010/31/EU amends and recasts Directive 2002/91/EC, which makes it necessary to transpose the amendments introduced with respect to the former Directive into the Spanish legal system.

All of the above considered, Order FOM/1635/2013, of 10 September updates the CTE DB-HE Basic Document on energy saving, and Directive 2010/31/EU on the energy efficiency requirement in buildings is partially transposed into the Spanish legal system.

References

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- Directive 2010/31/EC of the European Parliament and of the Council of 19 May 2010, on the energy performance of buildings (recast)
- Law 2/2011, dated on 4th March 2011, on Sustainable Economy.
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- Basic Procedure for the Energy Efficiency Certification Buildings. Royal Decree 235/2013, dated on 5th of April 2013.
- Order FOM/1635/2013, of 10 September, updating the DB-HE Basic Document "Energy Saving", of the Technical Building Code, approved by Royal Decree 314/2006 of 17 March.
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