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| It is proposed to the Council of Ministers the approval of the following draft provision: |

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| **Draft Royal Decree, amending the Technical Building Code, approved by Royal Decree 314/2006, of 17 March** |

Law 38/1999, of 5 November, on Building Regulations, defines the Technical Building Code (CTE) as the regulatory framework that establishes the basic quality requirements for buildings and their installations and that enables compliance with the basic requirements established in Article 3. The Technical Building Code (CTE) provided for in this law was approved by Royal Decree 314/2006 of 17 March. The basic documents that make up Part II of the CTE set out and, where appropriate, quantify the basic requirements laid down in Part I through the setting of performance target levels or limits or other parameters. In particular, the DB-HE basic document “Energy Savings” specifies and quantifies the energy efficiency requirements to be met by newly constructed buildings, as well as interventions on existing buildings.

On 30 May 2018, Directive (EU) 2018/844 of the European Parliament and of the Council amending Directive 2010/31/EU on the energy performance of buildings and Directive 2012/27/EU on energy efficiency was adopted.

This directive encourages the introduction of specific requirements for the implementation of electric vehicle charging infrastructures in car parks in buildings. Thus, both the building and mobility sectors shall be strategic areas for the overall decarbonisation of the economy, with a regulatory framework that aims to boost innovation, sustainability and energy efficiency in these sectors.

In turn, the development of infrastructure for the intelligent charging of electric vehicles will contribute to energy management and flexibility, the use of renewable energies and the improvement of air quality, and its energy performance will be optimised by making buildings more digital and incorporating new technologies into the field.

For its part, the Integrated National Energy and Climate Plan 2021-2030 (PNIEC) submitted by Spain to the European Commission envisages the promotion of electric mobility as a measure to reduce energy consumption and vehicle emissions through regulatory adaptation and incorporation of European Union law allowing for the deployment of electric vehicle charging infrastructure in line with the development of vehicle fleet electrification, as well as through other mechanisms of encouragement and support.

In order to achieve these objectives and to partially transpose the Directive in this respect, this Royal Decree introduces into the Technical Building Code a new basic energy saving requirement relating to the minimum allocations for charging infrastructure of electric vehicles, which is being developed in the new Section HE 6 ‘Minimum charging infrastructure facilities for electric vehicles’ of the Basic Document DB-HE ’Energy Savings’.

On the other hand, it should be noted that Law 7/2021, of 20 May, on climate change and energy transition, in Article 15(10), refers to the CTE for this regulation to establish the minimum electric vehicle charging infrastructure provisions for existing buildings for use other than private residential use that have a parking area with more than twenty spaces, either inside or in an assigned outdoor space, provisions which should be in place before 1 January 2023. However, these minimum allocations have finally been determined by Royal Decree-Law 29/2021 of 21 December, which adopts urgent measures in the field of energy to promote electric mobility, self-consumption and the deployment of renewable energy, which includes this requirement in Article 4.

In order to complete the regulation of electric vehicle charging infrastructures, Royal Decree 1053/2014, of 12 December, is also amended, approving a new Complementary Technical Instruction (ITC) BT 52 ‘Special purpose installations. Infrastructure for recharging electric vehicles’, of the Low Voltage Electrotechnical Regulation, approved by Royal Decree 842/2002, of 2 August, and other complementary technical instructions of the same are amended.

Furthermore, as a measure for promoting renewable energies, improving the competitiveness of the productive sectors and driving consumers to become more involved in the management of their energy, the PNIEC foresees the development of self-consumption with renewable energy and distributed generation in residential and business areas.

In this regard, the approval of Royal Decree 244/2019, of 5 April, which regulates the administrative, technical and economic conditions for the self-consumption of electricity has enabled, among other aspects, collective self-consumption, and at the same time has reduced the administrative procedures for the implementation of self-consumption. It is therefore considered that the current legal framework allows for the broadening of the scope of the basic requirement HE 5 relating to the minimum generation of electricity from renewable energy sources both by making it applicable in buildings for private residential use and by lowering the threshold of constructed surface in buildings of all uses from which the requirement applies.

In addition, it is considered necessary to amend some sections of the Basic Documents DB-HE ‘Energy Saving’ and DB-HS ‘Health’ to facilitate their application, and the prompt modification of the Basic Document DB-SUA ‘Safety of Use and Accessibility’ to incorporate accessibility criteria for recharging stations in accessible parking spaces.

The amendment of the CTE relating to the incorporation of the new Section HE 6 ‘Minimum provisions for electric vehicle charging infrastructure’ of the Basic Document DB-HE on Energy Saving, as well as the amendment of Royal Decree 1053/2014, of 12 December, which approves a new Complementary Technical Instruction (ITC) BT 52 included in the first final provision are part of the regulatory reforms envisaged in the Recovery, Transformation and Resilience Plan (PRTR). Specifically component 1 of the PRTR on ‘Sustainable, safe and connected mobility shock plan in urban and metropolitan environments’ engages the approval of this Royal Decree implementing the aforementioned regulatory reforms within the C1.R1 reform called ‘Plan for the deployment of charging infrastructure and the promotion of electric vehicles’. The C1.R1 reform is designed as the statutory, regulatory and strategic framework to facilitate the deployment of charging infrastructure to promote electric vehicles in Spain and has two milestones. The first of these is formed by Order TMA/178/2020 of 19 February amending the Order of 16 December 1997, which regulates accesses to State roads, service roads and the construction of service facilities, and by Royal Decree Law 23/2020 of 23 June, which approves measures in the field of energy and other areas for economic reactivation. The second milestone of the C1.R1. reform incorporates the approval of this Royal Decree amending the Technical Building Code and Royal Decree 1053/2014, of 12 December, approving a new Complementary Technical Instruction (ITC) BT 52. The time commitment milestone for this reform is the entry into force of the Royal Decree regulating it before 30 June 2022. Reform C1.R1. is linked to investment C1.I2 “Incentive plan for the installation of charging points, the acquisition of electric and fuel cell vehicles and innovation in electromobility, charging and green hydrogen.” This investment incorporates lines of aid for the installation of charging stations specified in Royal Decree 266/2021, of 13 April, approving the direct granting of aid to the autonomous communities and the cities of Ceuta and Melilla for the implementation of incentive programmes linked to electric mobility (MOVES III) within the framework of the PRTR.

This Royal Decree respects the (principle of Do No Significant Harm (DNSH) and the conditions for climate and digital labelling, in accordance with the provisions of the PRTR, Regulation EU/2021/241 of the European Parliament and of the Council of 12 February 2021 establishing the Resilience and Recovery Mechanism, and its implementing legislation, in particular the Communication from the Commission Technical Guidance on the application of the principle of no significant harm under the Resilience and Recovery Mechanism Regulation, as well as the requirements of the Council Implementing Decision on the approval of the evaluation of the Spanish Recovery, Transformation and Resilience Plan. This includes compliance with the specific conditions set out in Component 1, as well as in Reform 1 in which this Royal Decree is framed, both with regard to the DNSH principle and to climate and digital labelling, and especially those set out in sections 3, 6 and 8 of the PRTR Component document. PRTR investments C1.I2, associated with reform C1.R1, also respect the principle of no significant harm to the environment and the conditions of climate and digital labelling.

This Royal Decree complies with the principles of necessity, effectiveness, proportionality, legal certainty, transparency and efficiency established in article 129 of Law 39/2015, of 1 October, on the Common Administrative Procedure of Public Administrations. With regard to the principles of necessity and effectiveness, the law responds to the obligation to transpose European directives into national law and is in line with objectives of the general interest, such as the adaptation of building infrastructure to promote sustainable mobility and the use of renewable energy. This will result in well-being in society and protect the environment. This Royal Decree is also consistent with the principle of proportionality, as it provides the necessary and sufficient means to implement the legal mandate provided for in the Directive, but does not require an innovation that may be unnecessary or exceed legal requirements, nor does it entail a restriction of citizens’ rights. This regulation meets the principle of legal certainty because it was developed according to the procedures defined in Government Law 50/1997 of 27 November 1997 and the principle of transparency because it clearly identifies its purpose and its publicly accessible explanatory memorandum explains its contents in full. Finally, it also meets the principle of efficiency because it does not impose any administrative burden.

This general provision has been subject to the procedures of prior public consultation and public hearing and information established in Article 26 of Law 50/1997, of 27 November, of the Government, as well as the information procedure in the field of technical regulations and rules on information society services, provided for in Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 and in Royal Decree 1337/1999 of 31 July 1999.

By virtue of this, on the proposal of the Minister of Transport, Mobility and Urban Agenda and the Minister for the Ecological Transition and the Demographic Challenge, in agreement with the Council of State and after deliberations by the Council of Ministers at its meeting on

THE FOLLOWING IS DECREED:

Single Article. *Amendment of the Technical Building Code (CTE) approved by Royal Decree 314/2006 of 17 March 2006.*

The Technical Building Code (CTE), approved by Royal Decree 314/2006, of 17 March, is amended as follows:

One. The index in Part I is amended as follows:

The wording '15.6. Basic requirement HE5: Minimum generation of electricity' shall read as follows:

«15.6. Basic requirement HE 5: Minimum generation of electricity from renewable sources’

An additional point with the following text is inserted in the reference to Article 15:

«15.7. Basic requirement HE6: Minimum charging infrastructure facilities for electric vehicles.

Two. Article 15 of Part I is amended as follows:

Point 15.6 is amended to read as follows:

‘15.6 Basic requirement HE 5: Minimum generation of electricity from renewable sources.

Buildings shall have electricity generation systems from renewable sources for their own use or to supply the grid.”

A new section 15.7 is added with the following content:

«15.7 Basic requirement HE 6: Minimum charging infrastructure facilities for electric vehicles.

Buildings shall have minimum infrastructure enabling the charging of electric vehicles.’

Three. The following amendments are made to the Basic Document DB-HE ‘Energy saving’, included in Part II:

1. In the first subparagraph of section “I Subject” of the “Introduction” in the sentence “Sections of this DB correspond to the basic requirements HE 0 a to HE 5”, instead of “HE 5”, “HE 6” should appear.
2. In section I “Subject” of the “Introduction”, the reference to Article 15.6 of Part I of the CTE is amended to read:

«15.6 Basic requirement HE 5: Minimum generation of electricity from renewable sources.

Buildings shall have electricity generation systems from renewable sources for their own use or to supply the grid.”

1. In section I “Subject” of the “Introduction”, an additional point is inserted in the reference to Article 15 of Part I of the CTE at the end of the CTE, with the following text:

«15.7. Basic requirement HE 6: Minimum charging infrastructure facilities for electric vehicles.

Buildings shall have minimum infrastructure enabling the charging of *electric vehicle*s.’

1. In the table of contents, the title of Section HE 5 is amended to read:

«Section HE 5 Minimum generation of electrical energy from renewable sources.»

1. An additional point with the following text is inserted in the reference to Article 15 in the index:

‘Section HE 6 Minimum charging infrastructure facilities for electric vehicles

1. Scope of application
2. Description of the requirement
3. Quantification of the requirement
4. Justification of the requirement
5. Construction, maintenance and upkeep

5.1 Execution

5.2 Monitoring execution of the works

5.3 Checking the completed work

5.4 Maintenance and upkeep of the building’

1. In section HE 0, section 1 Scope, paragraph 1, the text: ‘...where the total extended useful area exceeds 50 m2;’, is replaced by ‘...where the extended usable area exceeds 50 m2;’.
2. In Section HE 0, section 3 Quantification of the requirement, section 3.1 Non-renewable primary energy consumption, paragraph 1, the term ‘Cep,nren’ is replaced by ‘Cep,nren’ and the term ‘Cep,nren,lim’ is replaced by ‘Cep,nren,lim’.
3. In Section HE 0, section 3 Quantification of the requirement, section 3.1 Non-renewable primary energy consumption, paragraph 2, the term ‘Cep,nren,lim’ is replaced by ‘Cep,nren,lim’.
4. In Section HE 0, section 3 Quantification of the requirement, section 3.2. Total primary energy consumption, paragraph 1, the term ‘Cep,tot’ is replaced by ‘Cep,tot’.
5. In Section HE 0, section 3 Quantification of the requirement, section 3.2 Total primary energy consumption, paragraph 2, the term ‘Cep,tot,lim’ is replaced by ‘Cep,tot,lim’.
6. In Section HE 0, section 3 Quantification of the requirement, the term ‘*private residential use’* should be in italics.
7. In Section HE 0, in section 4.1 ‘Calculation procedure’, in paragraph 9 the words ‘recognised document’ are replaced by ‘Recognised Energy Certification Document for Buildings’.
8. In section HE 0, in section 4.1 ‘Calculation procedure’, paragraph 9 becomes paragraph 11 and the following subparagraphs are added:

«9 The calculation of the energy balance required for the verification of the requirements of this BD is carried out in accordance with UNE-EN ISO 52000-1:2019: *Overall assessment of the energy performance of buildings. Part 1: general framework and procedures*, using an export factor Kexp = 0.’

«10 For the purposes of allocating the various services, the distribution of the electricity produced on-site, in each time interval, is calculated proportionally to the electrical consumption of the consumption concerned (heating, cooling, ventilation, ACS and in tertiary use, in addition, lighting).’

1. In section HE 0, section 4.3 Internal requests and operational conditions, paragraph 2, the term ‘*private residential use*’ should be in italics.

ñ) In section HE 0, section 4.5 Reference systems in private residential use, the term ‘*private residential use*’ should be italicised in both the title and paragraph 1.

1. In Section HE 1, section 3 Quantification of the requirement, section 3.1.1. Transmittance of the *thermal envelope*, the term ‘compactness’ in tables 3.1.1.b-HE1 and tables 3.1.1.c-HE1, should be in italics.
2. In Section HE 1, section 3 Quantification of the requirement, section 3.1.1. Transmittance of the *thermal envelope*, the term ‘compactness’ in the table footnotes 3.1.1.b-HE1 and tables 3.1.1.c-HE1, and the term ‘compactness’ in the table footnote in Table 3.1.1.c-HE1 should be in italics.
3. In Section HE 1, section 3 Quantification of the requirement, section 3.1.1. *Thermal envelope* transmittance, section 3, the term ‘*private residential use’* should be italicised in both paragraph 3 and table 3.1.1.b-HE1.
4. In Section HE 1, section 3 Quantification of the requirement, section 3.1.1. Transmittance of the *thermal envelope*, the term ‘thermal envelope’ in tables 3.1.1.b-HE1 and 3.1.1.c-HE1, should be in italics.
5. In Section HE 1, section 3 Quantification of the requirement, in section 3.1.1 ‘*Transmittance of the thermal envelope*’, the following subparagraph is added:

«6 Alternatively, buildings or, in the case of partial interventions on existing buildings, parts of buildings on which interventions are carried out, whose heating and cooling demands are less, in both cases, than 15 kWh/m2 may be excluded from compliance with the *overall coefficient of heat transfer through the thermal envelope* (K).’

1. In Section HE 1, section 3 Quantification of the requirement, section 3.1.2 Solar control of the thermal envelope, the text: ‘Table 3.1.2-HE1 Limit value of the solar control parameter qsol;jul,lim [kWh/m2·mes]’ is replaced by: ‘Table 3.1.2-HE1 Limit value of the solar control parameter qsol;jul,lim [kWh/m2·mes]’.
2. In section HE 1, section 3 Quantification of the requirement, section 3.1.3 Air permeability of the thermal envelope, the term ‘thermal envelope’ must be in italics in both the title of the section and the title of Table 3.1.3.a-HE1.
3. In Section HE 1, section 3 Quantification of the requirement, section 3.1.3 ‘Air permeability of the *thermal envelope*’, the following new paragraph 3 is added:

‘3 «In the case of alterations, table 3.1.3.a-HE1 above shall only apply to those elements of the *thermal envelope* that are replaced, incorporated, or substantially modified;»

The numbering of current paragraphs 3 and 4 of section 3.1.3 ‘Air permeability of the *thermal envelope*’ are replaced by 4 and 5 respectively.

1. In section HE 1, section 3 Quantification of the requirement, section 3.1.3 Air permeability of the *thermal envelope*, the term ‘compactness’ in Table 3.1.3.b-HE1, the term ‘compactness’ in the table in Table 3.1.3.b-HE1 and the term ‘private residential use’ in paragraph 3, should be in italics.
2. In section HE 1, section 3 Quantification of the requirement, section 3.1.3 Air permeability of the *thermal envelope,* table 3.1.3.b-HE1, where it says ‘m3/m2’ it should read ‘m3/m2’ with the 2 as a superscript.
3. In Section HE 1, section 4 Justification of the requirement, the term ‘compactness’ in section 4.1.b) and the term ‘private residential use’ in section 4.1.g) should be in italics.
4. In section HE 3, in Table 3.1-HE3 Installation efficiency limit value (VEEIlim), the words ‘Stores and small shops’ are replaced by ‘Stores and small shops (10)’ and the following footnote is added:

“(10) The term store refers to both small independent shops and the part for commercial use that is not commonly used in shopping centres.”

1. In section HE 3, section 3.3 Control and regulatory systems, paragraph 2, which reads ‘...may be replaced by one of the following two options:

- activation and deactivation control by a timed presence detection system; or

- a timed push-button system.’

should read ‘...may be replaced by one of the following two options:

- activation and deactivation control by a *timed presence detection system*, or

- a *timer system* by means of a push-button.’

1. In section HE 3, section 4 Justification of the requirement, paragraph 1(b), where it reads ‘...the efficiency of the *lamps* used (in terms of lum/W)’ it should read ‘...the efficiency of the *lamps* used (in terms of lm/W)’
2. In section HE 4, section 2 Description of the requirement, paragraph 1 shall read as follows:

«1 To a large extent, buildings shall meet their needs for DHW and water heating for heated indoor pools by using *energy from renewable sources* or renewable cogeneration processes; either generated in the building itself or through connection to a *district heating system*.’

1. In section HE 4, section 3 Quantification of the requirement, section 3.1 Minimum renewable contribution for DHW and/or pool heating, paragraph 4, the text: ‘... more than 2.5 when electrically actuated and greater than 1.15 when operated by thermal energy...’ is replaced by ‘... equal to or greater than 2.5 when electrically operated and equal to or greater than 1.15 when operated by thermal energy...’.
2. In section HE 4, section 3 Quantification of the requirement, section 3.1 Minimum renewable contribution for DHW and/or pool heating, paragraph 5, the text: ‘... residential buildings...’ should be replaced by ‘... buildings for *private residential use*...’.
3. In Section HE 4, before section ‘5.1. “Execution" the following shall be inserted «5. Construction, maintenance and upkeep" as a title.
4. In Section HE 5, the title ‘Section HE 5 Minimum generation of electricity’ is replaced by ‘Section HE 5 Minimum generation of electricity from renewable sources.’
5. In Section HE 5, paragraph 1 ‘Scope’ is worded as follows:

«1 This section applies in the following cases:

a) newly built buildings when they exceed 1,000 m2 constructed;

b) extensions of existing buildings, when the built area is increased by more than 1,000 m2.

c) existing buildings that are completely refurbished, or where there is a change of use characteristic thereof, when they exceed 1,000 m2 of constructed surface area.

The built-up area shall be deemed to include the surface area of the parking areas inside the building and exclude the common outdoor areas.»

1. In Section HE 5, the first subparagraph of section 2 ‘Characterisation of the requirement’ is worded as follows:

«1 Buildings shall have electricity generation systems from renewable sources for their own use or to supply the grid.”

1. In Section HE 5, paragraph 3 ‘’Quantification of the requirement’ is worded as follows:

«1 The *minimum power to install* Pmin shall be the lowest of the result from the following two equations:

P1 = Fpr;el · S

P2 = 0.1 · (0.5 · Sc - Soc )

where:

Pmin *power to install* [kW];

Fpr;el power generation factor, which takes the value 0.005 for private residential use and 0.010 for other uses [kW/m2];

S surface of built area of the building [m2];

Sc surface area of non-trafficable roof or accessible for upkeep only [m2];

Soc surface area of non-trafficable roof or accessible for upkeep only occupied by thermal solar collectors [m2].

2 In buildings where, for urban or architectural reasons or because they are officially protected buildings, where it is the authority that grants the official protection that determines the unalterable elements, the minimum *power to install* cannot be reached, this impossibility shall be justified by analysing the different alternatives, and the solution that reaches the maximum installed power possible shall be adopted.»

1. In Section HE 5, the following shall be added in paragraph 4 ‘Justification of the requirement’:

c) where appropriate, reasons which prevent the minimum required *power to install* to be reached, analysis of alternatives and the solution adopted to achieve the maximum possible installed power.’

ll) In Basic Document DB-HE ‘Energy saving’, Section HE 6 is added with the title ‘Minimum *charging infrastructure facilities for electric vehicles*‘ and the following content:

‘Section HE 6  
Minimum *charging infrastructure facilities for electric vehicle*  
*s*

1 Scope

1 The requirements set out in this section apply to buildings that have a parking area, either inside or outside the building, in the following cases:

a) newly constructed buildings;

b) existing buildings, in the following cases:

* changes in the characteristic use of the building;
* extensions, in cases which include interventions into the car park and the surface area or constructed volume of the unit or *units of use* on which the intervention takes place is increased by more than 10 %, and the increased usable area is greater than 50 m2;
* reforms that include interventions into the car park and which renew more than 25 % of the total surface area of the final *thermal envelope* of the building;
* interventions in the electrical installation of the building affecting more than 50 % of the power installed in the building prior to the intervention, in cases where the parking is located inside the building, provided that there is a right to act in the parking area by the developer carrying out such an intervention;
* interventions in the electrical installation of the car park affecting more than 50 % of the power installed in the car park before the intervention.

1. The following fall outside the scope:

a) buildings for use other than private residential with a parking area of no more than 10 parking spaces;

b) existing buildings for use other than private residential with a parking area of no more than 20 parking spaces and existing buildings of *private residential use*, where, in both cases, the cost of complying with this paragraph exceeds 7 % of the cost of the extension, change of use or renovation intervention which gives rise to the obligation for compliance. In order to determine the cost of the interventions referred to above, their actual and effective cost shall be considered, understood to be their physical construction cost;

c) buildings which are officially protected because they are part of a declared environment or because of their particular architectural or historical value are excluded from these obligations in so far as compliance with the requirements established in this section could unreasonably alter their character or appearance, and it shall be the official protection authority that determines the unalterable elements.

2 Description of the requirement

1 Buildings shall have minimum infrastructure enabling the charging of *electric vehicles*.

This *electric vehicle recharging infrastructure* will comply with the provisions of the current Low Voltage Electrotechnical Regulation and its Additional Technical Instruction (ITC) BT 52 “Special purpose installations. Infrastructure for recharging *electric vehicles*”.

3 Quantification of the requirement

1 In buildings for *private residential use* wiring systems will be installed to allow future supply to *recharging stations* for 100 % of parking spaces.

2 In buildings for use other than private residential, wiring systems will be installed to allow future supply to *recharging stations* for at least 20 % of parking spaces.

In addition, a *recharging station* will be installed for every 40 parking spaces, or fraction thereof.

In buildings for use other than private residential use owned by the General State Administration or by public bodies linked to it or dependent on it, the provision shall be greater than that generally established, with the installation of one *recharging station* for every 20 parking spaces, or fraction thereof.

In the case of car parks with accessible parking spaces, as set out in the Basic Document on Safety in Use and Accessibility (DB SUA), one *recharging station* shall be installed for every 5 accessible parking spaces. The *recharging stations* at these locations shall be counted for the purpose of compliance with the quantification of the requirement.

3 For buildings that have units for *private residential use* together with units for different use, where the parking areas linked to each use are not clearly differentiated, the criterion for the characteristic use of the building shall apply.

4 Justification of the requirement

1 To demonstrate that a building meets the requirements of this Basic Document, the design documents shall include the following information on the building or relevant part thereof:

a) wiring diagram used for dimensioning, as described in the Low Voltage Electrotechnical Regulation;

b) description of the main trunking and the conduits prepared, indicating the percentage of parking spaces with wiring systems and the minimum percentage required;

c) number of *recharging stations* installed and minimum number resulting from the quantification of the requirement;

d) types of *recharging stations* and their power ratings.

5 Construction, maintenance and upkeep

5.1 Execution

1 The construction works of the building shall be carried out in accordance with the project and its modifications authorised by the construction manager subject to the agreement of the developer, the applicable legislation, the specifications of the Low Voltage Electrotechnical Regulation and in its Additional Technical Instruction ITC BT-52 “Special purpose installations. Infrastructure for recharging *electric vehicles*”, to the standards of good construction practice and to the instructions of the construction manager and the project implementation manager, as referred to in Article 7 of Part I of the CTE.

5.2 Monitoring execution of the works

1 The execution of the work shall be monitored in accordance with the project specifications, its annexes and modifications authorised by the construction manager and the instructions of the project implementation manager, following the specifications of the Low Voltage Electrotechnical Regulations, in accordance with Article 7(3) of Part I of the CTE and other applicable regulations.

2 Execution of the work shall be checked to ensure that inspections are performed at the required frequency, as per the project specifications.

3 Any modifications made during execution of the works shall be recorded in the completed works documentation, and in all cases the minimum conditions set out in this Basic Document must be satisfied.

4 Documentation relating to the characteristics of the products, equipment and systems incorporated into the building shall be included in the Book of the Building.

5.3 Checking the completed work

1 The inspection of completed works must follow the criteria indicated in Article 7(4) of Part I of the CTE.

2 This section of the Basic Document does not prescribe final tests.

5.4 Maintenance and upkeep of the building

1 The maintenance plan included in the Building Book shall include the operations and frequency required for the maintenance, over time, of the design and performance parameters of the *electric vehicle charging infrastructure*.

2 Likewise, the Building Book will document all interventions, whether repair, refurbishment or rehabilitation, carried out throughout the life of the building.’

mm) In Annex A, the terms ‘Initial illumination’ and ‘Reflectance’ are deleted.

nn) In Annex A, in the definition of ‘*Total coefficient of heat transmission (through the thermal envelope of the building*) (K)’, where it reads: “... K = X Hx/Aint..." it should read, with "x", "x" and "int" as subscript: “... K = Σx Hx / Aint...’, the terms ‘parietodynamic walls’ and ‘Trombe walls’ should be in italics.

ññ) In Annex A, in the definition of ‘Compactness’, the word ‘compactness’ in the second paragraph should be in italics.

oo) In Annex A, in the definition of ‘Operating Conditions’, the term ‘private residential use’ should be in italics.

pp) In Annex A, in the definition of ‘Non-renewable primary energy consumption’, where it reads: “... Non-renewable primary energy consumption..." it should read, with "ep,nren" in subscript: “... Non-renewable primary energy consumption (Cep,nren)...».

qq) In Annex A, in the definition of ‘Total primary energy consumption’, where it reads: “... Total primary energy consumption..." it should read, with "ep,tot" in subscript: “... Total primary energy consumption (Cep,tot)...».

rr) In Annex A, in the definition of ‘solar control (qsol;jul)’, where it reads: “... the useful surface of the spaces...” it should read: “... the useful surface of the living spaces...». The full stop and new paragraph at the end of the definition of the component of the formula ‘Hsol;jul’ is replaced by a semicolon, and the definition of another component of the formula is added as follows:

“Autilarea considered to be in accordance with section 4.6 of HE 0.”

ss) In Annex A, in the definition of the term ‘Final energy’, the phrase ‘It is that purchased by consumers, in the form of electricity or fuels used directly’ is replaced by ‘It is that supplied to building systems to provide services; this is typically supplied through fuels, on-site generation or specific networks (electricity, gas, district heating or cooling, etc.)’.

tt) In Annex A, in the definition of ‘Conditioned living space’, the term ‘private residential use’ should be in italics.

uu) In Annex A, in the definition of ‘Period of use’, the term ‘private residential use’ in the second paragraph should be in italics.

vv) In Annex A, in the definition of the term ‘Thermal transmission (U-value)’, the following sentence shall be added at the end of the definition:

«Expressed in W/m2K.”

ww) In Annex A, in the definition of ‘Energy Efficiency Value of the Installation (VEEI)’, the term ‘private residential use’ should be in italics.

xx) The following terms are incorporated in Annex A ‘Terminology’:

‘***Auxiliary equipment*:** electrical or electronic equipment associated with the light, different for each type light, whose function is the ignition and control of operating conditions. This auxiliary equipment, unless it is electronic, is formed by a combination of starter, ballast and condenser.

‘***Charging station*:** set of elements necessary to connect the electric vehicle to the fixed electrical installation required for charging. *Charging stations* are classified as:

1. Single charging point, consisting of the necessary protections, one or more sockets not specific to the *electric vehicle* and, where applicable, the envelope.

2. SAVE *(Specific Electric Vehicle Power Supply System)* type recharging point.»

‘***Charging Infrastructure for electric vehicles*:** set of physical and logical devices intended for the charging of electric vehicles meeting the safety and availability requirements foreseen for each case by the Low Voltage Electrotechnical Regulation, capable of providing a full and comprehensive charging service. It includes *charging stations*, the control system, electrical conduits, electrical control and protection panels and measuring equipment, when these are exclusively for *electric vehicle* charging.’

’***Specific Electric Vehicle Power System (SAVE)*:** set of equipment assembled to supply electric power for the charging of an electric vehicle including protections of the charging station, the connection cable (with phase, neutral and protection conductors) the socket base or connector and, where applicable, an alternating-continuous converter. This system shall, where appropriate, allow communication between the *electric vehicle* and the fixed installation.’

«***Private residential use***: Building or area intended for permanent residence, whatever type of building: detached house, apartment building, etc., both for public and private development.’

«***Electric vehicle***: motor vehicle equipped with a propulsion group with at least one non-peripheral electrical mechanism operating as an energy converter and equipped with a rechargeable electric energy storage system, which can be recharged from the outside.’

yy) In Annex C, the term ‘thermal envelope’ in the title and the term ‘non-habitable spaces’ in section 1(a) must be in italics.

zz) In Annex D, the terms ‘Operational conditions’, ‘use profiles’ and ‘private residential use’ must be italicised in the title, paragraph 2 and the tables Table a-Annex D, Table b-Annex D and Table c-Annex D.

aaa) In Annex D, paragraph ‘2 The *operational conditions* and the *use profile*...’ should be re-numbered ‘3 The *operational conditions* and the *use profile*...’

bbb) In Annex D, in paragraph 4, the text ‘Recognised Document’ is replaced by ‘Recognised Document for the Energy Certification of Buildings’.

ccc) In Annex E, the term ‘private residential use’ in section 1 should be in italics.

ddd) In Annex F, the term ‘private residential use’ should be in italics both in section 1 and in Table a-Annex F.

eee) In Annex H, the following wording shall be inserted after the title of the section:

‘Determination of the *air permeability* of the building must be carried out by one of the following methods.’

fff) In Annex H, the wording ‘The value of the ratio of the air change at 50 Pa, n50, can be obtained by testing according to method B of UNE-EN 13829:2002 Determination of air tightness in buildings. Method of pressurisation by means of a fan.» is replaced by: ‘The value of the *air change ratio* at 50 Pa, n50 by means of testing shall be obtained from method 1 or 2 of UNE-EN ISO 9972: 2019 *Thermal performance of buildings. Determination of air permeability of buildings. Fan pressurisation method.’.*

ggg) In Section H, section 2, where it reads: «... 2. The value of the ratio of the change of air at 50 Pa, n50, can be calculated from the following equation:’, it should read: «... 1. The value of the *ratio of the air change* at 50 Pa, n50 by reference values shall be obtained from the following expression:' where it reads: ‘n50 = 0.629 · (Co · Ao + Ch · Ah) / V’ it should read: ‘n50 = 0.629 · (Co · Ao + Ch · Ah) / Vint’, where it reads: “V is the internal volume of the thermal envelope, in [m3]” it should read: ‘Vint is the internal air volume of the *thermal envelope*, in [m3]’, and where it reads: ‘Ao is the surface of the opaque part of the *thermal envelope*, in [m2]’ it should read: ‘Ao is the surface of the opaque part of the *thermal envelope* in contact with outdoor air, at [m2]’.

hhh) In Annex H, the terms ‘thermal envelope’ and ‘holes’ should be in italics in the description of the terms Co, Ch, Ah and in Table a-Annex H.

Four.The following modifications are introduced in the Basic Document DB-SUA ‘Safety in Use and Accessibility’ included in Part II of the Technical Building Code:

In Annex A, the definition of ‘Accessible parking space’ shall include a hyphen with the text:

‘- In the event that the *accessible parking space* has an electric vehicle charging station, the *accessible itinerary* shall also include this charging station. The power outlets and connectors of these charging stations shall be chromatically contrasted with the environment, placed at a height of between 80 and 120 cm and the distance from corners must be at least 35 cm.’

Five. The following amendments are introduced in the Basic Document DB-HS ‘Health’, included in Part II:

a) In Section HS 4, in section 3.2.2.1 under point 2, the sentence ‘the minimum contribution of solar energy for domestic hot water production’ is replaced by the sentence ‘the minimum contribution of renewable energy to cover domestic hot water demand’.

b) In HS Section 4, in section 6.2. the letter ‘e) polyvinyl chloride chlorinated (PVC-C) tubes according to UNE-EN ISO 15874-1:2013, UNE-EN ISO 15874-2:2013 and UNE-EN ISO 15874-3:2013;’ is replaced by the letter ‘e) polychlorinated vinyl chloride (PVC-C) tubes, according to UNE-EN ISO 15877-1:2009 (+UNE-EN ISO 15877-1:2009/A1): 2011), UNE-EN ISO 15877-2:2009 (+UNE-EN ISO 15877-2:2009/A1: 2011) and UNE-EN ISO 15877-3:2009 (+UNE-EN ISO 15877-3:2009/A1: 2011);”.

c) In Section HS 4, in section 6.2. the letter ‘h) polybutylene pipes (PB) according to UNE-EN ISO 15876-1:2017, UNE-EN ISO 15876-2:2017 and UNE-EN ISO 15876-3:2017;’ is replaced by the letter ‘h) polybutylene pipes (PB) according to UNE-EN ISO 15876-1:2017, UNE-EN ISO 15876-2:2017 and UNE-EN ISO 15876-3:2017;’.

d) In Section HS 4, Appendix C, where it reads: “Plastics piping systems for hot and cold water installations. Polybutylene (PB). Part 1: General” it should read: “Plastics piping systems for hot and cold water installations. Polybutene (PB). Part 1: General

e) In Section HS 4, Appendix C, where it reads: “Plastics piping systems for hot and cold water installations. Polybutylene (PB). Part 2: Pipes" it should read: “Plastics piping systems for hot and cold water installations. Polybutene (PB). Part 2: Pipes.

f) In Section HS 4, Appendix C, where it reads: “Plastics piping systems for hot and cold water installations. Polybutylene (PB). Part 3: Fittings" it should read: “Plastics piping systems for hot and cold water installations. Polybutene (PB). Part 3: Fittings.

g) In Section HS 4, Appendix C, the following are to be incorporated after the reference to standard ‘UNE-EN ISO 15876-3: 2017 Plastics piping systems for hot and cold water installations. Polybutene (PB). Part 3: Fittings’ the following standards:

“UNE-EN ISO 15877-1:2009 Plastics piping systems for hot and cold water installations. Chlorinated poly (vinyl chloride) (PVC-C). Part 1: General provisions (+UNE-EN ISO 15877-1:2009/A1:2011)

UNE-EN ISO 15877-2:2009 Plastics piping systems for hot and cold water installations. Chlorinated poly (vinyl chloride) (PVC-C). Part 2: Pipes. (+UNE-EN ISO 15877-2:2009/A1:2011)

UNE-EN ISO 15877-3:2009 Plastics piping systems for hot and cold water installations. Chlorinated poly (vinyl chloride) (PVC-C). Part 3: Fittings. (+UNE-EN ISO 15877-3:2009/A1:2011)

First transitional provision. *Buildings exempt from the provisions of this Royal Decree.*

The amendments to the Technical Building Code (CTE) adopted by this Royal Decree shall not apply to new buildings or work on existing buildings which, in both cases, have already applied for a municipal works permit at the time when this Royal Decree comes into force.

Such works shall begin within the maximum period of efficiency of said permit, in accordance with its governing regulations or, failing that, within six months of said permit being granted. If not, the projects must be adapted to the amendments to the CTE approved by this Royal Decree.

Second transitional provision. *Buildings for which application of the provisions in this Royal Decree is voluntary.*

The amendments to the Technical Building Code approved by this Royal Decree shall apply voluntarily to new construction works and to works on existing buildings for which, in both cases, a municipal works permit is requested within six months of the entry into force of this Royal Decree.

Such works shall begin within the maximum period of efficiency of said permit, in accordance with its governing regulations or, failing that, within six months of said permit being granted. If not, the projects must be adapted to the amendments to the CTE approved by this Royal Decree.

Third transitional provision. *Buildings for which application of the provisions in this Royal Decree is mandatory.*

Application of the amendments to the Technical Building Code (CTE) adopted by this Royal Decree shall be mandatory for new buildings or work on existing buildings applying for a municipal works permit later than nine months after this provision comes into force.

First final provision. *Amendment of Royal Decree 1053/2014, of 12 December, approving a new Complementary Technical Instruction (ITC) BT 52 "Special purpose installations. Infrastructure for recharging electric vehicles", of the Low Voltage Electrotechnical Regulations, approved by Royal Decree 842/2002, of 2 August, and other complementary technical instructions are amended.*

Royal Decree 1053/2014, of 12 December, approving a new Complementary Technical Instruction (ITC) BT 52 ‘Special purpose installations. Infrastructure for recharging electric vehicles’, of the Low Voltage Electrotechnical Regulations, approved by Royal Decree 842/2002, of 2 August, and other complementary technical instructions are amended as follows:

One. The first additional provision is amended and shall be worded as follows:

'First additional provision. Minimum structural facilities for the charging of electric vehicles in car parks not assigned to buildings, newly constructed or subject to major renovations, and on public roads.

1. In newly constructed car parks or those undergoing major renovations not located in or adjoining to a building, and therefore outside the scope of the Basic Energy Savings Document (DB HE) of the Technical Building Code, at least one charging station for every 40 parking spaces or fraction thereof must be installed. A car park is considered to be newly constructed when the construction project is submitted to the competent public administration for processing after the entry into force of this Royal Decree.

2. The installations necessary to supply charging stations located in the electric vehicle spaces on public roads provided for in the supra-municipal or municipal Sustainable Mobility Plans must be guaranteed.’

Two. Section 3.2 of the INSTRUCCIÓN TÉCNICA COMPLEMENTARIA (ITC) BT-52 is amended to read as follows:

«3.2 Installation in car parks or collective parking spaces adjoining buildings or building complexes.

Electrical installations for charging electric vehicles located in car parks or car parks inside or attached to buildings or housing estates shall follow any of the schemes described above. Different schemes may be used in the same building provided that all the requirements laid down in this (ITC) BT-52 are met.

In scheme 4a, the charging circuit shall follow the installation conditions described in (ITC) BT-15, using cables and conduction systems of the same types and characteristics as for an individual bypass, and the section of cable shall be calculated in accordance with the general requirements of section 5 of this ITC. It is not necessary to foresee an extension of the section of cables to determine the diameter or transverse dimensions of the conduction system to be used.

Scheme 4b shall be used when the supply of the charging stations is designed as an integral part or extension to the electrical installation serving the general services of the garages.

Both in existing installations and in new ones, and in order to facilitate the use of the selected electrical scheme, tables housing general protections and other devices for charging electric vehicles may be located in the rooms designated for this purpose or in common areas.

Electrical pre-installation for electric vehicle charging in car parks located or adjoined to buildings or building complexes shall facilitate the subsequent use of any of the possible installation schemes. This shall include the following elements:

a) Installation of cable conduction systems from the centralisation of meters and by the main roads of the car parks in order to be able to power later the charging stations that can be located in the individual parking spaces or car parks. Where the pre-installation is planned for 100 % of the spaces, the cable conduction systems shall reach each of the spaces. Where the pre-installation is not planned for 100 % of the spaces, the spaces considered for compliance with the regulatory provision of cable conduction systems shall be defined and these systems shall reach each of these spaces.

b) The centralisation of meters shall be sized according to the electrical scheme chosen for charging the electric vehicle and as set out in (ITC) BT-16. Backup modules shall be installed for at least 20 % of the garage spaces not associated with a dwelling and even if all spaces are associated with dwellings at least one backup module. These spare modules shall have the capacity to house the main meter, and the overcurrent protection devices associated with the meter, either with fuses or circuit breakers.

The socket outlets or connectors installed in the charging station and its automatic protective circuit breakers shall comply with one of the options given in section 5.4.»

Three. The first subparagraph of section 5.4. of ADDITIONAL TECHNICAL INSTRUCTION (ITC) BT-52 is amended to read as follows:

«5.4 Connection point. The connection point shall be located next to the square to be supplied and shall be permanently installed in an enclosure.

The minimum installation height for the sockets and connectors shall be 60 cm above ground level. If the charging station is intended for public use, the maximum height shall be 120 cm. In accessible parking spaces, sockets and connectors shall have a chromatic contrast with the surroundings, shall be located at a height of between 80 and 120 cm and the distance to corner junctions shall be at least 35 cm.»

Second final provision. *Transposition of European Union law.*

This Royal Decree transposes into Spanish law articles 8.2, 8.4, 8.5 and 8.6 of Directive 2010/31/EU of the European Parliament and of the Council on the energy performance of buildings, as amended by Directive (EU) 2018/844 of the European Parliament and of the Council of 30 May 2018 amending Directive 2010/31/EU on the energy performance of buildings and Directive 2012/27/EU on energy efficiency.

Third final provision. *Entry into force.*

This Royal Decree shall enter into force on the day after its publication in the Official State Gazette.

TO BE SUBMITTED TO THE COUNCIL OF MINISTERS

Madrid, on 2022

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| THE MINISTER FOR TRANSPORT, MOBILITY AND THE URBAN AGENDA  Raquel Sánchez Jiménez | THIRD DEPUTY PRIME MINISTER OF THE GOVERNMENT AND MINISTER FOR THE ECOLOGICAL TRANSITION AND THE DEMOGRAPHIC CHALLENGE,  Teresa Ribera Rodríguez |