**Draft Royal Decree, of , 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 establishes the conditions for developing the minimum infrastructure necessary for smart charging of electric vehicles 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 smart 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 Energy Savings Document. In order to ensure accessibility conditions for charging points in accessible parking spaces, the basic document DB-SUA “Safety of Use and Accessibility” is amended.

In turn, and in accordance with the provisions of Law 7/2021, of 20 May, on climate change and energy transition, a single additional provision of Royal Decree 314/2006, of 17 March, which approves the Technical Building Code, establishes the following requirements the requirement of minimum provisions for electric vehicle charging infrastructure in existing buildings for use other than private residential use, which have a parking area with more than twenty parking spaces, either inside or in an assigned outdoor space, and which are not included in the scope of application of section HE6 of the Basic Document on Energy Saving. Law 7/2021, of 20 May, on climate change and energy transition, establishes the obligation to make this provision defined in the Technical Building Code effective before 1 January 2023.

Finally, in order to complete the regulation of electric vehicle charging infrastructures, the Complementary Technical Instruction (ITC) BT-52 of the Low Voltage Electrotechnical Regulation, approved by Royal Decree 1053/2014, of 12 December, is amended and other complementary technical instructions of the same are modified.

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 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, having noticed errors and misprints in Royal Decree 732/2019, of 20 December, amending the Technical Building Code, approved by Royal Decree 314/2006, of 17 March, published in the "BOE" no. 311 of 27 December 2019, the appropriate corrections are hereby made. In turn, in order to clarify the application mode of the basic document DB-HE on "Energy Saving" after its update by the aforementioned Royal Decree 732/2019, it is considered necessary to modify the wording of some sections of section HE 1 on conditions for the control of energy demand and Annex A on terminology of the aforementioned basic document.

The amendment of the Technical Code relating to the incorporation of the new Section HE 6 "Minimum provisions for electric vehicle charging infrastructure" of the Basic Document 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 and the single additional provision to Royal Decree 314/2006, of 17 March, which approves the Technical Building Code, are part of the legal 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 legal 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. 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 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, as well as 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 Third Deputy Prime Minister of the Government and 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.*

Royal Decree 314/2006 of 17 March 2006 approving the Technical Building Code (CTE) is amended as follows:

One. Part I of the Technical Building Code is amended as follows:

— In the table of contents the name «15.6. Basic requirement HE5: Minimum generation of electricity' shall read as follows:

«15.6. Basic requirement HE 5: Section HE5 Minimum generation of electricity from renewable sources.»

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

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

* In Chapter 3, Article 15, 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.”

* The following is inserted at the end of Article 15:

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

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

* The following additional provision is inserted:

“Single additional provision. *Minimum charging infrastructure facilities for electric vehicles in buildings for uses other than private residential buildings with more than twenty parking spaces.*

In accordance with the provisions of Law 7/2021 of 20 May on Climate Change and Energy Transition, before 1 January 2023, all buildings for use other than private residential use that have a parking area with more than twenty parking spaces, either inside or in a designated outdoor space, must have the following minimum electric vehicle charging infrastructure facilities:

— in general, one charging station shall be installed for every 40 parking spaces or equivalent up to 1,000 spaces, and one additional charging station for each additional 100 spaces or equivalent. Alternatively, the municipal licence or authorisation for the work necessary to execute this charging infrastructure shall be requested or, in the event that the owner of the building is subject to Law 9/2017, of 8 November, on Public Sector Contracts, which transposes into Spanish law the Directives of the European Parliament and of the Council 2014/23/EU and 2014/24/EU, of 26 February 2014, the tender for said work or the project or technical document necessary to define the same shall be initiated, by means of an announcement on the corresponding contracting platform. Works made official by application for a municipal permit or authorisation must begin within the maximum period of permit effectiveness in accordance with the relevant regulations, and, failing that, within six months of the date on which the permit was granted. Works made official by the commencement of their tendering or the tendering of the project or technical document defining them must begin within the maximum period of permit effectiveness, municipal authorisation or equivalent or, failing that, within six months of the date on which it was granted.

— in buildings owned by the General Administration of the State or by public bodies linked to it or belonging to it, one charging station shall be installed for every 20 parking spaces or equivalent up to 500 spaces, and one additional charging station for each additional 100 spaces or equivalent, or alternatively the tendering procedure for the works or the project or technical document necessary for the definition of the works shall be initiated by means of an announcement in the relevant procurement platform. Works made official by the commencement of their tendering or the tendering of the project or technical document defining them must begin within the maximum period of permit effectiveness, municipal authorisation or equivalent or, failing that, within six months of the date on which it was granted.

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

This electric vehicle charging infrastructure will comply with the provisions of Royal Decree 842/2002, of 2 August, which approves the Low Voltage Electrotechnical Regulation and its Complementary Technical Instruction (ITC) BT 52 "Installations for special purposes. Charging infrastructure for electric vehicles', as well as the provisions of sections 4. "Justification of the requirement" and 5. “Construction, maintenance and upkeep" of Section HE 6 "Minimum charging infrastructure facilities for electric vehicles" of the Basic Document DB-HE "Energy Savings".”

Two. The Basic Document DB-HE “Energy Savings” included in Part II of the Technical Building Code is amended, incorporating section HE 6 “Minimum charging infrastructure facilities for electric vehicles”, which is included as Annex I to this Royal Decree.

The following amendments are also made to the Basic Document DB-HE:

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 vehicles.’

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……………………………………………………………………………………..…………….. 33

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5.4 Maintenance and upkeep of the building………………………..………….. 35»

1. In Section HE 0 “Energy consumption limits”, in section 4.1 “Calculation procedure”, in paragraph 9 the words “Recognised Document” are replaced by “Recognised Energy Certification Document for Buildings”.
2. In Section HE 0 “Energy consumption limits”, 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 1 ‘Conditions for controlling energy demand’, 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 ‘Conditions for controlling energy demand’, in section 3.1.3 ‘Air permeability of the thermal envelope’, the following new paragraph 3 is added:

«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 3 Conditions of lighting installations, 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 4 Minimum contribution of renewable energy to meet demand for domestic hot water, section 2 ‘Description of the requirement’, Article 1 shall read as follows:

«1 Buildings shall meet their needs for ACS and water heating for heated indoor pools using or renewable cogeneration processes to a large extent; either generated in the building itself or through the connection to a district heating system.»

1. In Section HE 5 Minimum electrical energy generation, the title becomes:

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

1. In Section HE 5 Minimum generation of electricity, section 1 ‘Scope’ is worded as follows:

«1 This section applies in the following cases:

1. newly built buildings when they exceed 1,000 m2 constructed;
2. extensions of existing buildings, when the built area is increased by more than 1,000 m2.
3. 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 ‘Minimum electricity generation’, 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 ‘Minimum electrical energy generation’, section 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 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 ‘Minimum electrical energy generation’, the following shall be added in Section 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.’

1. The following amendments are made to Annex A "Terminology":

— In the definition of the term ‘Solar control (qsol;jul)’, the full stop 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.”

— In the definition of the term ‘Final energy’ the wording, ‘Is that which is purchased by consumers, in the form of electricity, fuels or other fuels used directly’ is replaced by ‘It is that which is supplied to the building systems to provide the services. This supply is normally provided through fuels, on-site generation or specific networks (electricity, gas, heat or cold district, etc.)’.

- In the definition of the term "Thermal transmittance (U)", the following sentence is added at the end of the definition:

«Expressed in W/m2K.”

1. 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.’

1. In Annex D, paragraph 4, the text «Recognised Document» is replaced by «Recognised Document for the Energy Certification of Buildings».
2. In Annex H Determination of the air permeability of the building, after the title of the section, the wording "Determination of the air permeability of the building must be carried out by one of the following methods." and in section 1 Determination by test, 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.».

Three.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 Section SUA 9 “Accessibility”, in Annex A “Terminology”, the definition of “Accessible parking space” now includes a hyphen with the text:

“- In the event that the accessible parking space has an electric vehicle charging station, the accessible itinerary also covers 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.’

Four. The following modification is introduced in the Basic Document DB-HS "Health", included in Part II of the Technical Building Code:

1. In Section HS 4 "Water supply", 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".

Five. The following corrections of errors and errata noted in the Basic Document DB-HE “Energy Savings” included in Part II of the Technical Building Code are made:

1. In section HE 0, section 1 Scope, paragraph 1, where it reads: «...where the total extended useful area exceeds 50 m2;», it should read «...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 2, where it reads: «... Cep’nren,lim...», it should read “... Cep,nren,lim...».
3. In section HE 0, section 3 Quantification of the requirement, section 3.2 Total primary energy consumption, paragraph 1, where it reads: “... Cep’tot...», it should read: «... Cep,tot...».
4. In section HE 0, section 3 Quantification of the requirement, section 3.2 Total primary energy consumption, paragraph 2, where it reads: «... Cep,tot...", it should read: «... Cep,tot...».
5. In section HE 0, tables 3.1.a-HE0 and 3.2.a-HE0 shall have the term “*private residential use*” in italics. In sections 3.1 Non-renewable primary energy consumption, section 2, and 3.2 Total primary energy consumption, section 2, the term “ *private residential use*” should be in italics.
6. In section HE 0, section 4.3 Internal requests and operational conditions, section 2, the term “*private residential use*” should be in italics.
7. 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.
8. In Section HE 1, section 3 Quantification of the requirement, section 3.11. 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.
9. In Section HE 1, section 3 Quantification of the requirement, section 3.11. 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.
10. 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.
11. In Section HE 1, section 3 Quantification of the requirement, section 3.1.1. Transmittance of the thermal envelope, the term “thermal envelope” in Table 3.1.1.c-HE1, should be in italics.
12. In Section HE 1, section 3 Quantification of the requirement, section 3.1.2 Solar control of the thermal envelope, where it states: «Table 3.1.2-HE1 Limit value of the solar control parameter qsol;jul,lim [KWh/m2·mes]”, should read, with “sun;jul,lim” as subscript: “Table 3.1.2-HE1 Limit value of the solar control parameter qsol;jul,lim [KWh/m2·mes]».
13. In section HE 1, section 3 Quantification of the requirement, section 3.1.3 Air permeability of the thermal envelope, the term “thermal envelope” should be in italics.
14. 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.
15. 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.
16. In section HE 4, section 3 Quantification of the requirement, section 3.1 Minimum renewable contribution for DHW and/or pool heating, paragraph 4, where it says: “...more than 2.5 when electrically actuated and greater than 1.15 when operated by thermal energy...” should read “... equal to or greater than 2.5 when electrically operated and equal to or greater than 1.15 when operated by thermal energy...”.
17. In section HE 4, section 3 Quantification of the requirement, section 3.1 Minimum renewable contribution for DHW and/or pool heating, paragraph 5, where it says: “... residential buildings...” it should read “... buildings for private residential use...”
18. In section HE 4, before section “5.1. “Execution" the following shall be inserted «5. Construction, maintenance and upkeep" as a title.
19. On page 140553, Annex A Terminology, 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...».
20. In Annex A Terminology, in the definition of “Compactness”, the word “compactness” in the second paragraph should be in italics.
21. In Annex A Terminology, in the definition of “Operating Conditions”, the term “private residential use” should be in italics.
22. In Annex A Terminology, 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)...».
23. In Annex A Terminology, in the definition of “Total primary energy consumption”, where it says: «... Total primary energy consumption..." it should read, with "ep,tot" in subscript: «... Total primary energy consumption (Cep,tot)...».
24. In Annex A Terminology, in the definition of “solar control (qsol;ju)», where it reads: “... the useful surface of the spaces...” it should read: “... the useful surface of the living spaces...».
25. In Annex A Terminology, in the definition of “Conditioned living Space”, the term “private residential use” should be in italics.
26. In Annex A Terminology, in the definition of “Period of use”, the term “private residential use” in the second paragraph should be in italics.
27. In Annex A Terminology, in the definition of “Energy Efficiency Value of the Installation (VEEI)”, the term “private residential use” should be in italics.
28. In Annex C Considerations for the definition of the thermal envelope, the term “thermal envelope” in the title should be in italics.
29. In Annex D Operational conditions and usage profiles, in the title, the terms “Operational Conditions” and “Use Profiles” must be italicised in the title, paragraph 2 and the tables Table a-Annex D, Table b-Annex D and Table c-Annex D.
30. In Annex E Indicative values of transmittance, the term ‘private residential use’ in section 1 must be in italics.
31. In Annex F ACS reference demand, the term “private residential use” should be in italics both in section 1 and in Table a-Annex F.
32. In Annex H Determination of the air permeability of the building, in section 2 Determination by reference values, 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) / Vin”, 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]”.
33. In Annex H Determination of the air permeability of the building, the term “thermal envelope” should be in italics in the description of the terms Vint, Co, Ch, Ah and in Table a-Annex H

Six. Corrections of the errors and errata noticed are made as follows: Basic Document DB-HS “Sanitation” included in Part II of the Technical Building Code:

1. In HS Section 4 "Water supply", 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);”.
2. In Section HS 4 "Water supply", 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;".
3. In Appendix C. Reference standards, 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
4. In Appendix C. Reference standards, 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.
5. In Appendix C. Reference standards, 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.
6. In Appendix C. Reference standards, 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.*

One. The first additional provision of Royal Decree 1053/2014 of 12 December, approving a new Complementary Technical Instruction (ITC) BT 52, 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 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 diagrams 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:

1. 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.
2. 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, 8.3 and 8.5 of 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.

Madrid, on

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