



**SLOVENSKI STANDARD**  
**SIST-TS CEN/TS 16629:2025**

**01-januar-2025**

---

**Energijske lastnosti stavb - Podrobna tehnična pravila za skupino standardov EPB**

Energy performance of buildings - Detailed technical rules for the set of EPB-standards

Energieeffizienz von Gebäuden - Detaillierte technische Regeln für das EPB-Normenpaket

Performance énergétique des bâtiments - Règles techniques détaillées pour la série de normes sur la performance énergétique des bâtiments

**Ta slovenski standard je istoveten z: CEN/TS 16629:2024**

---

[SIST-TS CEN/TS 16629:2025](https://standards.iteh.ai/catalog/standards/sist/b24e20b1-1dac-49a1-9521-766560041af1/sist-ts-cen-ts-16629-2025)

<https://standards.iteh.ai/catalog/standards/sist/b24e20b1-1dac-49a1-9521-766560041af1/sist-ts-cen-ts-16629-2025>

**ICS:**

27.015	Energijska učinkovitost. Ohranjanje energije na splošno	Energy efficiency. Energy conservation in general
91.120.10	Toplotna izolacija stavb	Thermal insulation of buildings

**SIST-TS CEN/TS 16629:2025**

**en,fr,de**



TECHNICAL SPECIFICATION  
SPÉCIFICATION TECHNIQUE  
TECHNISCHE SPEZIFIKATION

**CEN/TS 16629**

November 2024

ICS 91.120.10; 91.140.01

Supersedes CEN/TS 16629:2014

English Version

**Energy performance of buildings - Detailed technical rules  
for the set of EPB-standards**

Performance énergétique des bâtiments - Règles  
techniques détaillées pour la série de normes sur la  
performance énergétique des bâtiments

Energieeffizienz von Gebäuden - Detaillierte technische  
Regeln für das EPB-Normenpaket

This Technical Specification (CEN/TS) was approved by CEN on 14 July 2024 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

CEN members are required to announce the existence of this CEN/TS in the same way as for an EN and to make the CEN/TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the CEN/TS) until the final decision about the possible conversion of the CEN/TS into an EN is reached.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.

Document Preview

[SIST-TS CEN/TS 16629:2025](https://standards.iteh.ai/catalog/standards/sist/b24e20b1-1dac-49a1-9521-766560041afl/sist-ts-cen-ts-16629-2025)

<https://standards.iteh.ai/catalog/standards/sist/b24e20b1-1dac-49a1-9521-766560041afl/sist-ts-cen-ts-16629-2025>



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

<b>Contents</b>	<b>Page</b>
<b>European foreword</b> .....	<b>4</b>
<b>Introduction</b> .....	<b>5</b>
<b>1 Scope</b> .....	<b>7</b>
<b>2 Normative references</b> .....	<b>7</b>
<b>3 Terms and definitions</b> .....	<b>7</b>
<b>4 Abbreviations</b> .....	<b>8</b>
<b>5 General description</b> .....	<b>8</b>
<b>6 Overall coordination</b> .....	<b>8</b>
<b>6.1 General</b> .....	<b>8</b>
<b>6.2 Cooperation between CEN and ISO, general</b> .....	<b>8</b>
<b>6.3 Coordination within CEN</b> .....	<b>9</b>
<b>6.4 Coordination within ISO</b> .....	<b>9</b>
<b>6.5 Cooperation between CEN and ISO on EPB standards</b> .....	<b>10</b>
<b>6.6 Cooperation with adjacent or overlapping standardization areas</b> .....	<b>10</b>
<b>7 Coordination regarding the common EPB quality</b> .....	<b>11</b>
<b>7.1 Preparation and maintenance of the common EPB quality documents</b> .....	<b>11</b>
<b>7.2 Work item proposals</b> .....	<b>11</b>
<b>7.3 Preparation of EPB standards</b> .....	<b>12</b>
<b>7.4 Maintenance</b> .....	<b>12</b>
<b>7.5 Strategic planning</b> .....	<b>12</b>
<b>7.6 External communication and marketing</b> .....	<b>13</b>
<b>8 Application areas</b> .....	<b>13</b>
<b>8.1 General</b> .....	<b>13</b>
<b>8.2 Scope of the EPB standards</b> .....	<b>13</b>
<b>8.3 Support energy performance regulations</b> .....	<b>15</b>
<b>8.4 Energy services</b> .....	<b>15</b>
<b>8.5 Building categories</b> .....	<b>16</b>
<b>8.6 Different levels of complexities</b> .....	<b>16</b>
<b>8.7 EPB assessment process</b> .....	<b>16</b>
<b>8.8 Flexibility</b> .....	<b>16</b>
<b>8.8.1 General</b> .....	<b>16</b>
<b>8.8.2 Innovation and equivalent solutions</b> .....	<b>17</b>
<b>8.8.3 Flexibility and adaptability to future needs</b> .....	<b>17</b>
<b>8.9 Added values to the market</b> .....	<b>17</b>
<b>8.9.1 General</b> .....	<b>17</b>
<b>8.9.2 Procedures for tailored rating</b> .....	<b>18</b>
<b>8.9.3 Procedures for building and system design</b> .....	<b>19</b>
<b>9 Categories of EPB standards</b> .....	<b>19</b>

9.1	Modular structure .....	19
9.2	Themes and use categories .....	21
9.3	Numbering of the EPB documents .....	22
10	Aspects related to national implementation .....	22
10.1	General .....	22
10.2	National choices .....	22
10.3	Optional national application document .....	23
10.4	Technical information on the set of EPB standards and feedback .....	24
11	Common rules to verify the quality and consistency .....	24
11.1	General .....	24
11.2	Interoperability of each EPB standard .....	24
11.3	Verification and demonstration of individual EPB calculation standards .....	25
11.4	Relevance, sensitivity and balanced accuracy .....	25
11.5	Transparency aspects .....	25
11.6	Common example cases .....	25
12	Overarching structure of each EPB standard and supporting documents .....	25
12.1	Partitioning into documents .....	25
12.2	Normative standards and informative accompanying TRs .....	26
12.3	Common terms, definitions and symbols .....	27
12.4	Common assessment boundaries .....	27
12.5	Common building and systems partitioning rules for EPB assessment .....	27
12.6	List of technologies to be covered .....	27
12.7	Matching calculation time intervals .....	27
12.8	Common rules on input values and assumptions .....	27
12.9	Common operating assumptions and environment conditions .....	29
12.10	Common overarching output .....	29
13	Digital transformation .....	29
14	Common template and editorial rules for each standard .....	29
14.1	General .....	29
14.2	Common template of an EPB standard .....	29
14.3	Common technical and editorial rules for an EPB standard .....	30
14.4	Common template and technical and editorial rules for an accompanying TR .....	30
14.5	Common template and technical and editorial rules for a spreadsheet .....	30
Annex A (normative) The numbering of the ISO 52000 family .....		32
Bibliography .....		39

## CEN/TS 16629:2024 (E)

### European foreword

This document (CEN/TS 16629:2024) has been prepared by Technical Committee CEN/TC 371 “Energy performance of Buildings”, the secretariat of which is held by NEN.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes CEN/TS 16629:2014.

CEN/TS 16629:2024 includes the following significant technical changes with respect to the previous editions of CEN/TS 16629:

- The changes in the organization that aims to safeguard the overall quality and consistency of the set of EPB standards, both in CEN and in ISO.
- Removal of redundant content that, after the publication of CEN/TS 16628 has been covered elsewhere.
- Improvements based on experience from the preparation of the EPB standards since 2014
- Changes in the CEN and ISO rules.
- Discussions in the context of the preparation of a guidance document for the 2022 Systematic Review of the EPB standards that were published in 2017.
- The digital transformation process: further -proactive- steps into the direction of making the standards (closer to) machine readable and software ready (ISO SMART initiative [4], CEN initiative Standards of the Future [5])
- In Europe, the European Directive on the Energy Performance of Buildings (EPBD) was revised (2024) [3]. The role of the set of EPB standards is reinforced. There are also important changes in the requirements on EPB calculation procedures and EPB indicators, minimum requirements and certificates.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

## Introduction

CEN/TS 16629:2014 was prepared under a mandate given to CEN by the European Commission and the European Free Trade Association (Mandate M/480 [1]) to support requirements of EU Directive 2010/31/EC on the energy performance of buildings (EPBD [2]). It formed part of a series of standards aimed at European harmonization of the methodology for the calculation of the energy performance of buildings.

This document replaces CEN/TS 16629:2014 and aims to support the EPBD 2024 [3]. At the same time this document aims to be of global relevance, because many EPB standards are also available at global level as EN ISO standards and their number is increasing. This development strengthens the quality and usability of the whole set of EPB standards. In case there are conflicting needs at a certain level of detail, parallel options can be provided, as explained in this document.

The EPBD [3] Intends to promote the improvement of the energy performance of buildings and the reduction of greenhouse gas emissions from buildings within the European Union, with a view to achieving a zero-emission building stock by 2050 taking into account outdoor climatic and local conditions, as well as indoor climate requirements and cost-effectiveness. This Directive lays down requirements as regards the common general framework for a methodology for calculating the integrated energy performance of buildings and building units, the application of minimum requirements to the energy performance of new buildings and new building units, existing buildings and building units that are subject to major renovation, building envelope elements and technical building systems whenever they are installed, retrofitted, replaced or upgraded. The Directive also lays down requirements as regards to the application of minimum energy performance standards (read: requirements) to existing buildings and existing building units, renovation passports, national building renovation plans, sustainable mobility infrastructure in and adjacent to buildings, smart buildings, energy performance certification of buildings or building units and specific inspection and control processes.

The use of international standards increases the accessibility, transparency and objectivity of the energy performance assessment in the CEN and ISO member countries, facilitating the comparison of best practices and supporting the market for high performing construction products. The use of EPB standards for calculating energy performance, as well as for energy performance certification and the inspection of heating systems and boilers, ventilation and air-conditioning systems will reduce costs compared to developing different standards at national level.

The mandate to CEN (M/480) [1] was issued to reformulate and add standards so that they become on the one hand unambiguous and compatible, and on the other hand a clear and explicit overview of the choices, boundary conditions and input data that need to be defined at national or regional level. Some national or regional choices may remain necessary, due to differences in climate, culture and building tradition, policy and legal frameworks. EPB standards should be flexible enough to allow for necessary national and regional differentiation and facilitate implementation in different countries and the setting of national or regional energy performance requirements.

The set of EPB standards aims to form a comprehensive package that is manageable and user-friendly for regulators, product technical specification drafters, drafters of European Assessment Documents (EAD), producers, notified bodies and users.

The basic principles and detailed technical rules were developed to ensure the necessary overall consistency in terminology, approach, input/output relations and formats in all EPB standards. In these rules and specifications, requirements from competent national legal authorities of EU and EFTA Member States were taken into account.

This document has been developed to guide all future work on EPB standards. In order to facilitate coordination, consistency and coherence of the set of EPB standards the following tools are available:

- a) a Technical Specification on the basic principles to be followed in drafting EPB standards CEN/TS 16628;

**CEN/TS 16629:2024 (E)**

- b) a Technical Specification on the detailed technical rules to be followed in drafting EPB standards (this document);
- c) in addition, the following documents are available at committee level:
  - 1) a template for the EPB standards;
  - 2) a template for the EPB TRs that will accompany each EPB standard;

NOTE Other available support tools and documentation:

- 1) a spreadsheet template to be used to demonstrate the correctness and usability of the standardized calculation procedures.
- 2) a guide to fill in National Annexes [\[6\]](#)
- 3) EPB Center website [\[7\]](#) with background information, explanation, FAQs, short videos, case studies and more.

The numbering of the clauses and subclauses in this document follows the numbering of clauses and subclauses in CEN/TS 16628. The Annexes in this document are used for more detailed information on specific subjects.

**iTeh Standards**  
**(<https://standards.iteh.ai>)**  
**Document Preview**

[SIST-TS CEN/TS 16629:2025](#)

<https://standards.iteh.ai/catalog/standards/sist/b24e20b1-1dac-49a1-9521-766560041afl/sist-ts-cen-ts-16629-2025>



## 1 Scope

This document describes the detailed technical rules to be followed in the development and maintenance of standards intended to support the assessment of the overall energy performance of a building (EPB) using a holistic approach.

This document supports the development and maintenance of a set of EPB standards that provides a systematic, clear, consistent and comprehensive methodology for the benefit of professionals and government entities. The main application is the assessment of the overall energy performance of a building in the context of building regulations, e.g. to specify EP requirements, EP rating and EP certificates.

The rules cover general and common aspects on the required quality, accuracy, usability, consistency and interoperability of the EPB standards as a set and individually. For that purpose, this document provides guidance on the process, structure and layout of these EPB standards and accompanying publications, complementary to the CEN and ISO internal regulations.

This document is based on the basic principles given in CEN/TS 16628, and is complemented by the overarching EPB standard, EN ISO 52000-1 and supporting documents.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

CEN ISO/TR 52000-2, *Energy performance of buildings — Overarching EPB assessment — Part 2: Explanation and justification of ISO 52000-1 (ISO/TR 52000-2)*

CEN/TS 16628:2024, *Energy Performance of Buildings — Basic Principles for the set of EPB-standards*

EN ISO 52000-1:2017, *Energy performance of buildings — Overarching EPB assessment — Part 1: General framework and procedures (ISO 52000-1:2017)*

EN ISO 52003-1, *Energy performance of buildings — Indicators, requirements, ratings and certificates — Part 1: General aspects and application to the overall energy performance (ISO 52003-1)*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN ISO 52000-1:2017 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <http://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

### 3.1

#### EPB standard

standard that complies with the requirements given in EN ISO 52000-1, CEN/TS 16628 and CEN/TS 16629 (the underlying document) or superseding documents

[SOURCE: ISO 52000-1:2017, 3.5.14, modified — The definition has been editorially revised.]

**CEN/TS 16629:2024 (E)****4 Abbreviations**

<b>Abbreviation</b>	<b>Term</b>
EC	European Commission
EP	energy performance
EPB	energy performance of buildings
EPBD	European directive on the energy performance of buildings
IEQ	indoor environmental quality
JAG	joint advisory group
JWG	joint working group
NSB	National Standards Body of CEN and/or ISO
NWIP	New Work Item Proposal
TC	Technical Committee
TR	Technical Report (of CEN or ISO)

**5 General description**

See CEN/TS 16628:2024, Clause 5. The various aspects involved are worked out successively in the following clauses. The numbering of the clauses in this document corresponds to the numbering in CEN/TS 16628.

**6 Overall coordination****6.1 General**

The basic principles described in CEN/TS 16628:2024, 6.1 shall be applied on the set of EPB standards. Practical rules for cooperation have been set up and are regularly updated based on the experience and feedback since the early days (2009) of the development of the set of EPB standards.

**6.2 Cooperation between CEN and ISO, general**

CEN ISO cooperation regarding individual EPB standards is based on the Vienna Agreement between CEN and ISO [8].

**NOTE** According to the Vienna Agreement, the revision of EN ISO standards is under ISO lead. If agreed by the CEN and ISO technical bodies, and specifically by the non-European members of the ISO technical body, the lead can however be assigned to CEN.

CEN and ISO have collaborated since decades to develop and publish common (EN ISO) standards to assess the thermal and solar properties of building components and elements, to calculate the energy needs for heating and cooling and to gather climatic data for energy calculations. Under Mandate M/480<sup>1</sup> these standards became part of the set of EPB standards. In addition, as a result of the work under Mandate M/480 and follow up activities, EPB standards from other areas were also prepared and published as EN ISO standards, including a number of overarching and other key EPB standards.

<sup>1</sup> See Introduction.

### 6.3 Coordination within CEN

To guard the coherency of EPB standards within CEN, central coordination by CEN/TC 371 (*Energy performance of buildings*) is required combined with active involvement and commitment of the five parallel CEN/TCs who have the technical expertise and competence regarding specific technological fields under the holistic approach:

- CEN/TC 89, Thermal performance of buildings and building components;
- CEN/TC 156, Ventilation for buildings;
- CEN/TC 169, Light and lighting;
- CEN/TC 228, Heating systems and water-based cooling systems in buildings;
- CEN/TC 247, Building automation, controls and building management.

The preparation of overarching EPB standards is assigned to CEN/TC 371.

CEN/TC 371 is also responsible for the coordination of the overall quality and consistency of the set of EPB standards in CEN (to prepare the rules and check the implementation) and for the overall strategy and communication regarding the total set.

In order to ensure that work on (possible) EPB standards complies with common EPB quality requirements set by CEN/TC 371 and the technical requirements set by the competent TCs, team leaders of groups of experts revising or drafting EPB standards are preferably appointed as formal liaison experts by the associated “parallel” TC to CEN/TC 371. Their task is to ensure that the contribution from the competent TC complies with the common EPB quality requirements and to report on any differences and considerations and by encompassing the respective decisions to the competent TC and CEN/TC 371.

### 6.4 Coordination within ISO

The preparation of EPB standards of common interest of ISO/TC 163 and ISO/TC 205 is assigned to the Joint Working Group of ISO/TC 163 and ISO/TC 205. This concerns mainly overarching EPB standards.

The coordination of the overall quality and consistency of the set of EPB standards in ISO is in the hands of:

- the Joint Advisory Group of ISO/TC 205 and ISO/TC 163 (ISO/TC 205/JAG1, Coordination of ISO 52000 family),
- the ISO/TC 163 and TC 205 Joint Working Group (ISO/TC 163/JWG 4, Energy Performance of Buildings using the holistic approach)

The JAG and JWG are complementary. The *raison d'être* of the JWG is to prepare documents (standards, technical specifications and TRs), as assigned to it by the parent committees. The JAG is under direct authority of the committee leaderships to ensure practical coordination and advise.

The core of the ISO JAG consists of the leadership of the JWG and the leaderships of ISO/TC 163, ISO/TC 205 and ISO/TC 163/SC 2, because the core of the holistic approach on EPB is by these committees. The ISO Technical Programme Manager (TPM) is also involved, because of the ISO 52000 family numbering, links with the Technical Management Board (TMB) and other committees and external communication. A liaison is established with ISO/TC 274 (Light and lighting).

A detailed task distribution between JWG and JAG has been worked out and decided by ISO/TC 163 and ISO/TC 205 in 2018 [9]. This includes preparation of the common EPB quality rules and checking their implementation, overall strategy and communication regarding the total set, issuing numbers of the ISO 52000 family of EPB standards, monitoring the quality during the development of an EPB standard, identification of work and more.

## CEN/TS 16629:2024 (E)

### 6.5 Cooperation between CEN and ISO on EPB standards

Good working relations have been established and should be maintained at experts level: many of the European experts are also active in the ISO working groups and, in case of CEN lead, non-European ISO experts are invited in CEN working groups, in accordance with the CEN and ISO rules.

With regard to the preparation of a common EN ISO standard:

Different choices between CEN and ISO can be made in the same way as choices that are provided at national or regional level via the normative template for the national choices (National Annex) of each EPB standard.

A special type of difference is on referencing other standards:

Practical solutions to make a differentiation for different regions **within** a common EN ISO standard have also been developed in consultation with both CEN/CCMC and ISO/CS. CEN members are bound to adopt European Standards at national level. They can only make reference to these even in case where there is a corresponding ISO standard. In consultation with both CEN/CCMC and ISO/CS a practical solution has been worked out, by the introduction of a normative annex, to indicate the regions for which the different references are applicable. An example will be given in the common template for EPB standards. New options should be explored, based on experiences in other domains (e.g. CEN Eurocodes), feedback from the NSBs and new options provided by the most recent CEN and ISO directives.

NOTE If all options to solve problems in developing an EN ISO standard have failed, developing separate standards is possible. The Vienna Agreement on the co-operation between CEN and ISO ([8]) leaves the possibility open to go separate ways at any moment, for each individual work item, if necessary.

Of course, the national choices that are offered in each EPB standard can also be used to differentiate between CEN and ISO needs or wishes within the same EPB standard.

Therefore, a specific difference does not necessarily have to lead to different standards with the risk of increased divergence and mismatch.

CEN ISO collaboration is also needed to safeguard the overall quality and consistency of **the set of EPB standards**:

- On the preparation of the EPB quality documents: CEN/TS 16628 and CEN/TS 16629 (this document) and on checking the implementation;
- the specification of overarching issues provided in EN ISO 52000-1;
- the standardization process;
- strategy and communication.

This collaboration is organized by liaising the chairperson of CEN/TC 371 to the ISO JAG and by mutual liaisons between the relevant CEN and ISO committees.

### 6.6 Cooperation with adjacent or overlapping standardization areas

Important adjacent standardization areas are:

- Assessment of **product data as input** for specific EPB standards:
  - CEN:
    - Sector Forum on Construction
    - CEN/TC 88 Thermal insulating materials and products