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Energy Performance of Buildings - Detailed Technical Rules for the set of EPB-standards

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 10/14

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# TECHNICAL SPECIFICATION

## **CEN/TS 16629**

# SPÉCIFICATION TECHNIQUE

# TECHNISCHE SPEZIFIKATION

July 2014

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### **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 10 May 2014 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.

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

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Cont	<b>Contents</b> Pag		
Forewo	ord	4	
Introdu	ıction	6	
1	Scope	7	
2	Normative references	7	
3	Terms and definitions	7	
4	Symbols, units and subscripts	7	
5	General		
6	Standardization process		
6.1	General	8	
6.2 6.2.1	Coordination of EPB-standards		
6.2.2	Coordination with product standards		
6.2.3	Coordination between CEN and ISO	9	
6.2.4	Dynamic interaction with national authorities		
7 7.1	Application rangeGeneral		
7.1 7.2	Energy performance requirements		
7.3	Energy certification	. 11	
7.4 7.5	System inspection		
7.5 7.6	Recommendations and energy auditing		
7.7	Different levels of complexities	. 11	
7.8	Flexibility	. 12	
8	National implementation and adaptation		
8.1 8.2	General Presenting national options		
8.3	Split between common part and national/regional choices and input data		
8.4	National annexes	. 13	
8.4.1	General		
8.4.2	Content of National implementing standards		
9 9.1	Modular structure		
9.2	Terms, definitions and symbols		
9.3	Matching time steps	. 14	
9.4	Input values and assumptions		
10	Common models and editorial rules		
10.1 10.1.1	Common structure of an EPB-standard		
10.1.1			
10.1.3	Introduction of the EPB-standard	. 16	
10.1.4	Scope of the EPB-standard	. 16	
10.1.5 10.1.6	Normative references within an EPB-standard  Definitions and symbols within an EPB-standard		
10.1.7			
	Time step used within an EPB-standard	. 18	
10.1.9	Individual method descriptions provided by an EPB-standard	. 19	

10.1.10	Quality control	.22
	Compliance check	
10.1.12	Annexes	
10.2	Common structure and contents of a Technical Report accompanying an EPB-standard	
10.3	Accompanying electronic spread sheet	
10.4	Editorial rules	
	General	
	-, 1,	
	Table style and numbering	
	Figures	
	Verbal forms, use of modal auxiliary verbs	
10.4.8	References in the normative text	.28
11	Quality aspects	. 28
11.1	Validation and demonstration	
11.2	Relevance, sensitivity and balanced accuracy	
	Relevance	
	Reproducibility	
11.3	Software proof	
11.3.1	·	
11.3.2	Naming	.30
	Options	
	Correlations	
11.3.5	Iterations	.30
11.3.6	Structuring of the method	.30
	Specifying all input/output variables	
11.4	Calculation options	
11.4.1	Different levels of complexities	.31
11.4.2	Hierarchy in simplified versus detailed procedures	.31
11.5	Quality control of the calculation	.31
11.6	Compliance check	.31
11.7	Common example cases	.31
Annex	A (normative) Technical rules application checklist	.33
<b>A</b> .1	General	.33
<b>A.2</b>	Checklist fields description	.33
A.2.1	Technical rule	.33
A.2.2	Application	.33
A.2.3	Details	.33
<b>Bibliog</b>	raphy	.38

### **Foreword**

This document (CEN/TS 16629:2014) has been prepared by Technical Committee CEN/TC 371 "Energy Performance of Buildings Project Group", 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 [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association (Mandate M/480, [2]).

This document supports requirements of EU Directive 2010/31/EC on the energy performance of buildings (EPBD). It forms part of a series of standards aimed at European harmonization of the methodology for the calculation of the energy performance of buildings.

Directive 2010/31/EU recasting the Directive 2002/91/EC on energy performance of buildings (EPBD) [1] promotes the improvement of the energy performance of buildings within the European Union, taking into account all types of energy uses (heating, lighting, cooling, air conditioning, ventilation) and outdoor climatic and local conditions, as well as indoor climate requirements and cost effectiveness (Article 1).

The Directive requires Member States to adopt measures and tools to achieve the prudent and rational use of energy resources. In order to achieve those goals, the EPBD requires increasing energy efficiency and the enhanced use of renewable energies in both new and existing buildings. One tool for this is the application by Member States of minimum requirements on the energy performance of new buildings and for existing buildings that are subject to major renovation, as well as for minimum performance requirements for the building envelope if energy-relevant parts are replaced or retrofitted. Other tools are energy certification of buildings, inspection of boilers and air-conditioning systems.

NOTE The use of European Standards increases the accessibility, transparency and objectivity of the energy performance assessment in the Member States facilitating the comparison of best practices and supporting the internal market for 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 first mandate to CEN to develop a set of standards to support the EPBD (M/343) resulted in the successful publication of several EPBD related CEN standards in 2007-2008. The second mandate to CEN (M/480, [2]) was issued to review the Mandate M/343 as the recast of the EPBD raises the need to revisit the standards and 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. Such national or regional choices remain necessary, due to differences in climate, culture and building tradition, policy and legal frameworks. Consequently, the current set of EPBD related standards had to be improved and expanded on the basis of the recast of the EPBD. EPB-standards should be flexible enough to allow for necessary national and regional differentiation and facilitate Member States implementation and the setting of requirements by the Member States.

The set of EBP-standards should consist of a comprehensive package of Technical Specifications and European Standards that are manageable and user-friendly for regulators, product Technical Specification drafters, drafters of European Technical Approval Guidelines/Common Understanding Assessment Procedures (ETAGs/CUAPs), producers, notified bodies and users.

The set-up of a coherent set EPB-standards under Mandate M/480 was split into two phases:

 the development of (and agreement on) the underlying basic principles and detailed technical rules for drafting EPB-standards providing a coherent modular structure and an overarching EPB-standard following these rules and principles; — on the basis of the results of phase 1: the preparation/revision of the complete set of EPB- standards.

The basic principles and 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 (aggregated by the CAP-EDMC liaison committee) were taken into account.

It is anticipated that during phase 2 additions or modifications of the overarching EPB-standard and/or basic principles and detailed technical rules might be needed.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this Technical Specification: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## Introduction

This Technical Specification has been developed to guide the revisions under M/480 phase 2 as well as all future work on EPB-standards. In order to facilitate coordination, consistency and coherence of EPB-standards, the following tools are available:

- a Technical Specification on the basic principles to be followed in drafting EPB-standards;
- b) a Technical Specification on the detailed technical rules to be followed in drafting EPB-standards (this document);
- c) in addition, the following TC/371 documents are available;
  - 1) a template for the EPB-standards, including reminders of applicable rules in the relevant clauses;
  - 2) a template for the EPB Technical Reports that shall accompany each EPB standard;
  - 3) a spread sheet template to be used to demonstrate the correctness of the standardized calculation procedures.

All work on (intended) EPB-standards will follow the basic principles and the detailed technical rules and relate to the overarching EPB-standard, (FprEN 15603).

## 1 Scope

This Technical Specification provides guidance in the form of detailed technical rules based on the basic principles, both for the overarching standard and for each standard within the set of EPB-standards.

These detailed technical rules give practical rules on the following subjects for EPB-standards:

- the standardization process, including collaborations and consultations;
- the application range of the standards;
- common general organization of each standard and the national implementation;
- the overarching structure for the energy performance assessment;
- common model(s) and editorial rules for each standard;
- common quality aspects for each standard.

### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

FprEN 15603:2014, Energy Performance of Buildings – Overarching standard EPB

CEN/TS 16628, Energy Performance of Buildings – Basic Principles for the set of EPB-standards

koniec náhľadu – text ďalej pokračuje v platenej verzii STN