

# **Energy performance of buildings - Methods for expressing energy performance and for energy certification of buildings**

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certification of buildings

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 15217:2007 sisaldab Euroopa standardi EN 15217:2007 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 21.08.2007 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 15217:2007 consists of the English text of the European standard EN 15217:2007.</p> <p>This document is endorsed on 21.08.2007 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b></p> <p>This European Standard specifies: a) overall indicators to express the energy performance of whole buildings, including heating, ventilation, air conditioning, domestic hot water and lighting systems. This includes different possible indicators; b) ways to express energy requirements for the design of new buildings or renovation of existing buildings; c) procedures to define reference values; d) ways to design a procedure for building energy certification. The standard can be applied to a group of buildings, if they are on the same lot, if they are serviced by the same technical building systems and if no more than one of them has a conditioned area of more than 1 000 m<sup>2</sup>.</p>	<p><b>Scope:</b></p> <p>This European Standard specifies: a) overall indicators to express the energy performance of whole buildings, including heating, ventilation, air conditioning, domestic hot water and lighting systems. This includes different possible indicators; b) ways to express energy requirements for the design of new buildings or renovation of existing buildings; c) procedures to define reference values; d) ways to design a procedure for building energy certification. The standard can be applied to a group of buildings, if they are on the same lot, if they are serviced by the same technical building systems and if no more than one of them has a conditioned area of more than 1 000 m<sup>2</sup>.</p>
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ICS 91.120.01

Võtmesõnad:

English Version

Energy performance of buildings - Methods for expressing  
energy performance and for energy certification of buildings

Performance énergétique des bâtiments - Méthodes  
d'expression de la performance énergétique et de  
certification énergétique des bâtiments

Energieeffizienz von Gebäuden - Verfahren zur Darstellung  
der Energieeffizienz und zur Erstellung des  
Gebäudeenergieausweises

This European Standard was approved by CEN on 10 May 2007.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

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



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## Foreword

This document (EN 15217:2007) has been prepared by Technical Committee CEN/TC 89 "Thermal performance of buildings and building components", the secretariat of which is held by SIS.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by December 2007, and conflicting national standards shall be withdrawn at the latest by December 2007.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association (Mandate M/343), and supports essential requirements of EU Directive 2002/91/EC on the energy performance of buildings (EPBD). It forms part of a series of standards aimed at European harmonisation of the methodology for the calculation of the energy performance of buildings. An overview of the whole set of standards is given in CEN/TR 15615.

Attention is drawn to the need for observance of EU Directives transposed into national legal requirements. Existing national regulations (with or without reference to national standards) may restrict for the time being the implementation of this European Standard.

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

## Introduction

Expression of the energy performance of buildings is needed:

- to enable the establishment of regulations regarding energy performance of buildings;
- to encourage building designers, owners, operators and users to improve the energy performance of buildings.

This European Standard provides methods to express the energy performance of buildings in a way that serves these purposes. It is based on standards that provide methods to calculate or measure energy performance.

This European Standard is intended to be used:

- by developers of a procedure for building energy certification;
- by building authorities setting minimum requirements on the energy performance;
- by building designers, building owners, building operators and building users to assess the performance of a planned or existing building and ways to improve it, and to express this performance.

## 1 Scope

This European Standard specifies:

- a) overall indicators to express the energy performance of whole buildings, including heating, ventilation, air conditioning, domestic hot water and lighting systems. This includes different possible indicators;
- b) ways to express energy requirements for the design of new buildings or renovation of existing buildings;
- c) procedures to define reference values;
- d) ways to design a procedure for building energy certification.

The standard can be applied to a group of buildings, if they are on the same lot, if they are serviced by the same technical building systems and if no more than one of them has a conditioned area of more than 1 000 m<sup>2</sup>.

This European Standard provides different options at different levels. When this European Standard is used to set up national or regional methods for expressing energy performance and/or for energy certification of buildings, the choices between the options is not made by the individual user, but by authorized national or regional bodies.

## 2 Normative references

The following referenced documents are indispensable for the application 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.

EN ISO 7345:1995, *Thermal insulation — Physical quantities and definitions (ISO 7345:1987)*

prEN 15603<sup>1)</sup>, *Energy performance of buildings — Overall energy use and definition of energy ratings*

## 3 Terms and definitions

For the purposes of this document, terms and definitions given in prEN 15603 and in EN ISO 7345:1995 and the following apply.

### 3.1

#### **energy certification**

procedures enabling to produce an energy certificate

### 3.2

#### **energy certificate**

document recognised by a member state or a legal person designated by it, which includes the energy performance of a building

NOTE The meaning of the terms "certificate" and "certification" in this European Standard differ from that in EN ISO/IEC 17000.

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1) prEN 15603 is a merge of prEN 15203 and prEN 15315.