

# SLOVENSKI STANDARD SIST EN ISO 52022-1:2017

01-september-2017

Nadomešča:

SIST EN 13363-1:2003+A1:2007

SIST EN 13363-1:2003+A1:2007/AC:2009

Energijske lastnosti stavb - Lastnosti gradbenih komponent in elementov glede toplote, sončnega obsevanja in dnevne svetlobe - 1. del: Poenostavljen izračun značilnosti energije sončnega sevanja in dnevne svetlobe za senčila v kombinaciji z zasteklitvijo (ISO 52022-1:2017)

Energy performance of buildings - Thermal, solar and daylight properties of building components and elements - Part 1: Simplified calculation method of the solar and daylight characteristics for solar protection devices combined with glazing (ISO 52022-1:2017)

Energy performance of buildings - Thermal, solar and daylight properties of building components and elements - Part 1: Simplified calculation method of the solar and daylight characteristics for solar protection devices combined with glazing (ISO 52022-1:2017)

Performance énergétique des bâtiments - Propriétés thermiques, solaires et en lumière du jour des composants et éléments du bâtiment - Partie 1: Méthode de calcul simplifiée des caractéristiques solaires et en lumière du jour pour les dispositifs de protection solaire combinés à des vitrages (ISO 52022-1:2017)

Ta slovenski standard je istoveten z: EN ISO 52022-1:2017

ICS:

17.180.20 Barve in merjenje svetlobe Colours and measurement of

light

91.120.10 Toplotna izolacija stavb Thermal insulation of

buildings

SIST EN ISO 52022-1:2017

en

2003-01. Slovenski inštitut za standardizacijo. Razmnoževanje celote ali delov tega standarda ni dovoljeno.

# iTeh Standards (https://standards.iteh.ai) Document Preview

SIST EN ISO 52022-1:2017

https://standards.iteh.ai/catalog/standards/sist/7ce84317-1400-4899-8df7-27ce83945480/sist-en-iso-52022-1-2017

# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

**EN ISO 52022-1** 

July 2017

ICS 91.120.10

Supersedes EN 13363-1:2003+A1:2007

### **English Version**

Energy performance of buildings - Thermal, solar and daylight properties of building components and elements - Part 1: Simplified calculation method of the solar and daylight characteristics for solar protection devices combined with glazing (ISO 52022-1:2017)

Performance énergétique des bâtiments - Propriétés thermiques, solaires et lumineuses des composants et éléments du bâtiment - Partie 1: Méthode de calcul simplifiée des caractéristiques solaires et lumineuses pour les dispositifs de protection solaire combinés à des vitrages (ISO 52022-1:2017)

Energieeffizienz von Gebäuden - Wärmetechnische, solare und tageslichtbezogene Eigenschaften von Bauteilen und Bauelementen - Teil 1: Vereinfachtes Berechnungsverfahren zur Ermittlung der solaren und tageslichtbezogenen Eigenschaften von Sonnenschutz in Kombination mit Verglasungen (ISO 52022-1:2017)

This European Standard was approved by CEN on 27 February 2017.

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-CENELEC 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-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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# **European foreword**

This document (EN ISO 52022-1:2017) has been prepared by Technical Committee CEN/TC 89 "Thermal performance of buildings and building components" the secretariat of which is held by SIS, in collaboration with Technical Committee ISO/TC 163 "Thermal performance and energy use in the built environment".

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 January 2018, and conflicting national standards shall be withdrawn at the latest by January 2018.

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 has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

This document is part of the set of standards on the energy performance of buildings (the set of EPB standards) and has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association (Mandate M/480, see reference [EF1] below), and supports essential requirements of EU Directive 2010/31/EC on the energy performance of buildings (EPBD, [EF2]).

In case this standard is used in the context of national or regional legal requirements, mandatory choices may be given at national or regional level for such specific applications, in particular for the application within the context of EU Directives transposed into national legal requirements.

Further target groups are users of the voluntary common European Union certification scheme for the energy performance of non-residential buildings (EPBD art.11.9) and any other regional (e.g. Pan European) parties wanting to motivate their assumptions by classifying the building energy performance for a dedicated building stock.

#### **References:**

- [EF1] Mandate M480, Mandate to CEN, CENELEC and ETSI for the elaboration and adoption of standards for a methodology calculating the integrated energy performance of buildings and promoting the energy efficiency of buildings, in accordance with the terms set in the recast of the Directive on the energy performance of buildings (2010/31/EU) of 14th December 2010
- [EF2] EPBD, Recast of the Directive on the energy performance of buildings (2010/31/EU) of 14<sup>th</sup> December 2010

This document supersedes EN 13363-1:2003+A1:2007.

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, 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

#### EN ISO 52022-1:2017 (E)

#### **Endorsement notice**

The text of ISO 52022-1:2017 has been approved by CEN as EN ISO 52022-1:2017 without any modification.

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# INTERNATIONAL STANDARD

ISO 52022-1

First edition 2017-06

Energy performance of buildings — Thermal, solar and daylight properties of building components and elements —

# Part 1:

Simplified calculation method of the solar and daylight characteristics for solar protection devices combined with glazing

Performance énergétique des bâtiments — Propriétés thermiques, solaires et lumineuses des composants et éléments du bâtiment —

1ttps://standards.1teh.a1/catalog/standards/s

Partie 1: Méthode de calcul simplifiée des caractéristiques solaires et lumineuses pour les dispositifs de protection solaire combinés à des vitrages



Reference number ISO 52022-1:2017(E)

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### ISO 52022-1:2017(E)

### **Foreword**

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="www.iso.org/directives">www.iso.org/directives</a>).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

ISO 52022-1 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 89, *Thermal performance of buildings and building components*, in collaboration with ISO Technical Committee ISO/TC 163, *Thermal performance and energy use in the built environment*, Subcommittee SC 2, *Calculation methods*, in accordance with the agreement on technical cooperation between ISO and CEN (Vienna Agreement).

A list of all parts in the ISO 52022 series can be found on the ISO website.

## Introduction

This document is part of a series aimed at the international harmonization of the methodology for assessing the energy performance of buildings. Throughout, this series is referred to as a "set of EPB standards".

All EPB standards follow specific rules to ensure overall consistency, unambiguity and transparency.

All EPB standards provide a certain flexibility with regard to the methods, the required input data and references to other EPB standards, by the introduction of a normative template in <u>Annex A</u> and <u>Annex B</u> with informative default choices.

For the correct use of this document, a normative template is given in  $\underline{Annex\ A}$  to specify these choices. Informative default choices are provided in  $\underline{Annex\ B}$ .

The main target groups for this document are architects, engineers and regulators.

Use by or for regulators: In case this document is used in the context of national or regional legal requirements, mandatory choices may be given at national or regional level for such specific applications. These choices (either the informative default choices from Annex B or choices adapted to national/regional needs, but in any case following the template of this Annex A) can be made available as national annex or as separate (e.g. legal) document (national data sheet).

#### NOTE 1 So in this case:

- the regulators will specify the choices;
- the individual user will apply the document to assess the energy performance of a building, and thereby use
  the choices made by the regulators

Topics addressed in this document can be subject to public regulation. Public regulation on the same topics can override the default values in Annex B of this document. Public regulation on the same topics can even, for certain applications, override the use of this document. Legal requirements and choices are in general not published in standards but in legal documents. In order to avoid double publications and difficult updating of double documents, a national annex may refer to the legal texts where national choices have been made by public authorities. Different national annexes or national data sheets are possible, for different applications.

It is expected, if the default values, choices and references to other EPB standards in <u>Annex B</u> are not followed due to national regulations, policy or traditions, that:

- national or regional authorities prepare data sheets containing the choices and national or regional values, according to the model in <u>Annex A</u>. In this case a national annex (e.g. NA) is recommended, containing a reference to these data sheets;
- or, by default, the national standards body will consider the possibility to add or include a national
  annex in agreement with the template of <u>Annex A</u>, in accordance to the legal documents that give
  national or regional values and choices.

Further target groups are parties wanting to motivate their assumptions by classifying the building energy performance for a dedicated building stock.

More information is provided in the Technical Report (ISO/TR 52022-2) accompanying this document.

The framework for overall EPB includes:

- a) common terms, definitions and symbols;
- b) building and assessment boundaries;
- c) building partitioning into space categories;