

### **BSI Standards Publication**

# Thermal insulating products for building applications — Determination of thickness



BS EN ISO 29466:2022 BRITISH STANDARD

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#### **National foreword**

This British Standard is the UK implementation of EN ISO 29466:2022. It is identical to ISO 29466:2022. It supersedes BS EN 823:2013, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee B/540/8, Mirror committee for ISO/TC 163 - Thermal Performance and Energy use in the built Environment.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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#### **English Version**

### Thermal insulating products for building applications - Determination of thickness (ISO 29466:2022)

Produits isolants thermiques destinés aux applications du bâtiment - Détermination de l'épaisseur (ISO 29466:2022)

Wärmedämmstoffe für das Bauwesen -Bestimmung der Dicke (ISO 29466:2022)

This European Standard was approved by CEN on 23 October 2022.

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BS EN ISO 29466:2022 **EN ISO 29466:2022 (E)** 

This is a preview of "BS EN ISO 29466:2022". Click here to purchase the full version from the ANSI store.

#### **European foreword**

This document (EN ISO 29466:2022) has been prepared by Technical Committee ISO/TC 163 "Thermal performance and energy use in the built environment" in collaboration with Technical Committee CEN/TC 88 "Thermal insulating materials and products" the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by May 2023, and conflicting national standards shall be withdrawn at the latest by November 2025.

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 EN 823:2013.

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

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#### **Endorsement notice**

The text of ISO 29466:2022 has been approved by CEN as EN ISO 29466:2022 without any modification.

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#### 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>).

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For an explanation of 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 <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

This document was prepared by Technical Committee ISO/TC 163, *Thermal performance and energy use in the built environment*, Subcommittee SC 1, *Test and measurement methods*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 88, *Thermal insulating materials and products*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 29466:2008), which has been technically revised.

The main changes are as follows:

- <u>Clause 2</u>, Normative references, has been added and the following numbering of clauses has been changed accordingly;
- a reference to <u>Annex B</u> has been added in <u>Clause 4</u>;
- the conditioning and testing conditions have been modified in  $\underline{6.3}$  and  $\underline{7.1}$ ;
- some editorial corrections have been made.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

## Thermal insulating products for building applications — Determination of thickness

#### 1 Scope

This document specifies the equipment and procedures for determining the thickness of full-size products. It is applicable to thermal insulating products.

This document provides the reference method. Other methods can be used (e.g. for quality control), provided a correlation has been established with this reference method; <u>Annex B</u> gives some examples of such methods.

#### 2 Normative references

There are no normative references in this document.

#### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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

- ISO Online browsing platform: available at <a href="https://www.iso.org/obp">https://www.iso.org/obp</a>
- IEC Electropedia: available at <a href="https://www.electropedia.org/">https://www.electropedia.org/</a>

#### 3.1

#### thickness

d

linear dimension measured perpendicularly to the length and width plane

#### 4 Principle

The distance is measured between a hard, flat reference surface on which the test specimen rests and a pressure plate resting freely on the top face of the specimen.

For products that can be penetrated or for rigid cellular foam products or rigid material, the test method shall be carried out as specified in  $\underbrace{Annex B}$ .

#### 5 Apparatus

#### **5.1 Measuring device**, comprised of

- a) a dial gauge, with a maximum permissible error of 0,5 mm and mounted on a rigid frame fastened to a flat rigid base plate that is at least as large as the test specimen;
- b) a square pressure plate, 200 mm square, which exerts a total pressure on the test specimen of either  $(50 \pm 1,5)$  Pa or  $(250 \pm 5)$  Pa (including the force exerted by the dial gauge).

If a higher accuracy is required, it is specified in the relevant product standard or agreed between parties.

An example of a suitable apparatus is given in <u>Figure 1</u>.