Thermal insulating products for building applications - Determination of thickness for floating-floor insulating products (ISO 29770:2022)



# EESTI STANDARDI EESSÕNA

# NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 29770:2022 sisaldab Euroopa standardi EN ISO 29770:2022 ingliskeelset teksti.

This Estonian standard EVS-EN ISO 29770:2022 consists of the English text of the European standard EN ISO 29770:2022.

Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.

This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.

Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 07.09.2022.

Date of Availability of the European standard is 07.09.2022.

Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.

The standard is available from the Estonian Centre for Standardisation and Accreditation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile <u>standardiosakond@evs.ee</u>.

#### ICS 91.100.60

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardimis- ja Akrediteerimiskeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardimis-ja Akrediteerimiskeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardimis-ja Akrediteerimiskeskusega: Koduleht www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation and Accreditation No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation and Accreditation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation and Accreditation:

Homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

# **EUROPEAN STANDARD**

# **EN ISO 29770**

# NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

September 2022

ICS 91.100.60

Supersedes EN 12431:2013

# **English Version**

# Thermal insulating products for building applications - Determination of thickness for floating-floor insulating products (ISO 29770:2022)

Produits isolants thermiques destinés aux applications du bâtiment - Détermination de l'épaisseur des produits d'isolation pour sol flottant (ISO 29770:2022) Wärmedämmstoffe für das Bauwesen - Bestimmung der Dicke von Dämmstoffen unter schwimmendem Estrich (ISO 29770:2022)

This European Standard was approved by CEN on 8 August 2022.

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, 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.



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

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

# **European foreword**

This document (EN ISO 29770:2022) has been prepared by Technical Committee ISO/TC 163/SC 1 "Test and measurement methods" 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 March 2023, and conflicting national standards shall be withdrawn at the latest by September 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 12431:2013.

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.

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, 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.

# **Endorsement notice**

The text of ISO 29770:2022 has been approved by CEN as EN ISO 29770:2022 without any modification.

Coi	ntents	Page
Fore	eword	iv
1	Scope	1
2	Normative references	1
3	Terms and definitions	
4	Principle	1
5	Apparatus	1
6	Test specimens 6.1 Dimensions of test specimens 6.2 Number of test specimens 6.3 Preparation of the test specimens 6.4 Conditioning of test specimens	
7	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	
8	Calculation and expression of results	4
9	Accuracy of measurement Test report	4

# **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 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 29770:2008), which has been technically revised.

The main changes are as follows:

- the terms and definitions in <u>Clause 3</u> have been removed and replaced in <u>7.2.2</u> and <u>7.2.3</u>;
- some editorial corrections.

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 for floating-floor insulating products

# 1 Scope

This document specifies the equipment and procedures for determining the thickness of thermal insulating products for impact sound insulation in floating-floor applications.

#### 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.

ISO 29768, Thermal insulating products for building applications — Determination of linear dimensions of test specimens

#### 3 Terms and definitions

No terms and definitions are listed in this document.

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>

### 4 Principle

The thickness is determined as the distance measured between a rigid, flat base plate on which the test specimen rests and a rigid, flat pressure plate exerting different specified pressures on the top surface of the test specimen.

# 5 Apparatus

**5.1 Dial gauge**, allowing readings to 0,1 mm, mounted on a rigid frame fastened to a rigid, flat base plate.

A device with the same accuracy for two readings of the thickness/deformation is placed symmetrically on a diagonal on the upper square plate of the device. The mean of these two readings is the thickness/deformation.

- **5.2 Base plate** and **pressure plate**, at least as large as the test specimen.
- **5.3 Pressure device**, capable of exerting a total pressure on the test specimen of  $(0.250 \pm 0.05)$  kPa, including the force exerted by the dial gauge.
- **5.4 Pressure device**, capable of exerting a total pressure on the test specimen of  $(2 \pm 0,020)$  kPa, including the force exerted by the dial gauge.