

Thermal insulating products for building equipment and industrial installations - Determination of water vapour transmission properties of preformed pipe insulation (ISO 12629:2022)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 12629:2022 sisaldab Euroopa standardi EN ISO 12629:2022 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 12629:2022 consists of the English text of the European standard EN ISO 12629:2022.
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English Version

**Thermal insulating products for building equipment and
industrial installations - Determination of water vapour
transmission properties of preformed pipe insulation (ISO
12629:2022)**

Produits isolants thermiques pour les équipements de
bâtiments et les installations industrielles -
Détermination des propriétés de transmission de la
vapeur d'eau des coquilles isolantes préformées (ISO
12629:2022)

Wärmedämmstoffe für die Haustechnik und für
betriebstechnische Anlagen - Bestimmung der
Wasserdampfdurchlässigkeit von vorgeformten
Rohrdämmstoffen (ISO 12629:2022)

This European Standard was approved by CEN on 7 August 2022.

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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 12629:2022) 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of an identical text or by endorsement, at the latest by March 2023, and conflicting national standards shall be withdrawn at the latest by September 2025.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 13469:2012.

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 12629:2022 has been approved by CEN as EN ISO 12629:2022 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 www.iso.org/directives).

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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 www.iso.org/iso/foreword.html.

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 12629:2011), which has been technically revised.

The main changes are as follows:

- EN 13469:2012 and ISO 12629:2011 have been merged into one document;
- technical revision of [Clause 3](#), Terms, definitions, symbols and subscripts, [6.3](#), Number of test specimens, [Clause 7](#), Procedure and [Clause 8](#), Calculation and expression of results;
- Annex A has been deleted;
- editorial revisions.

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 www.iso.org/members.html.

Thermal insulating products for building equipment and industrial installations — Determination of water vapour transmission properties of preformed pipe insulation

1 Scope

This document specifies the equipment and procedure for determining the water vapour transmission properties in the steady state under specified test conditions for test specimens of preformed pipe insulation. It is applicable to thermal insulating products.

It is intended to be used for homogeneous materials (see NOTE below) and for products which can have integral skins or adhered facings of some different material.

NOTE A material is considered to be homogeneous in terms of mass distribution if its density is approximately the same throughout, i.e. if the measured density values are close to its mean density.

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 9346, *Hygrothermal performance of buildings and building materials — Physical quantities for mass transfer — Vocabulary*

ISO 12628, *Thermal insulating products for building equipment and industrial installations — Determination of dimensions, squareness and linearity of preformed pipe insulation*

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

3 Terms, definitions, symbols, units and subscripts

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 9346 and the following apply.

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

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

3.1.1

water vapour flow rate

G

quantity of water vapour transmitted through the surface of the test specimen in mass divided by time

3.1.2

density of water vapour flow rate

g

mass of water vapour transferred through the specimen per area and per time under specified conditions of temperature, humidity and thickness