

Hygrothermal performance of building materials and products - Determination of water vapour transmission properties - Cup method (ISO 12572:2016 + ISO 12572:2016/Amd 1:2024)

EESTI STANDARDI EESSÕNA**NATIONAL FOREWORD**

See Eesti standard EVS-EN ISO 12572:2016+A1:2024 sisaldab Euroopa standardi EN ISO 12572:2016 ja selle muudatuse A1:2024 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 12572:2016+A1:2024 consists of the English text of the European standard EN ISO 12572:2016 and its amendment A1:2024.
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Muudatusega A1 lisatud või muudetud teksti algus ja lõpp on tekstis tähistatud sümbolitega $\boxed{A1}$ $\boxed{A1}$. Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.	The start and finish of text introduced or altered by amendment A1 is indicated in the text by tags $\boxed{A1}$ $\boxed{A1}$. The standard is available from the Estonian Centre for Standardisation and Accreditation.

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EUROPEAN STANDARD

EN ISO 12572 + A1

NORME EUROPÉENNE

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Hygrothermal performance of building materials and products - Determination of water vapour transmission properties - Cup method (ISO 12572:2016 + ISO 12572:2016/Amd 1:2024)

Performance hygrothermique des matériaux et produits pour le bâtiment - Détermination des propriétés de transmission de la vapeur d'eau - Méthode de la coupelle (ISO 12572:2016 + ISO 12572:2016/Amd 1:2024)

Wärme- und feuchtetechnisches Verhalten von Baustoffen und Bauprodukten - Bestimmung der Wasserdampfdurchlässigkeit - Verfahren mit einem Prüfgefäß (ISO 12572:2016 + ISO 12572:2016/Amd 1:2024)

This European Standard was approved by CEN on 16 July 2016. Amendment A1 was approved by CEN on 1 September 2024.

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COMITÉ EUROPÉEN DE NORMALISATION
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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

This document (EN ISO 12572:2016) 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 February 2017, and conflicting national standards shall be withdrawn at the latest by February 2017.

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Endorsement notice

The text of ISO 12572:2016 has been approved by CEN as EN ISO 12572:2016 without any modification.

Amendment A1 European foreword

This document (EN ISO 12572:2016/A1:2024) 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 89 "Thermal performance of buildings and building components" the secretariat of which is held by SIS.

This Amendment to the European Standard EN ISO 12572:2016 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 2025, and conflicting national standards shall be withdrawn at the latest by April 2025.

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Endorsement notice

The text of ISO 12572:2016/Amd 1:2024 has been approved by CEN as EN ISO 12572:2016/A1:2024 without any modification. 

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Contents

Page

Foreword	v
▣ Amendment A1 Foreword ▣	vi
1 Scope	1
2 Normative references	1
3 Terms, definitions, symbols, units and subscripts	1
3.1 Terms and definitions.....	1
3.2 Symbols and units	2
3.3 Subscripts	3
4 Principle	3
5 Apparatus	3
6 Test specimens	4
6.1 General principles for preparation of test specimens	4
6.2 Dimensions of test specimens.....	4
6.2.1 Shape and fit	4
6.2.2 Exposed area	4
6.2.3 Thickness of test specimens.....	5
6.3 Number of test specimens	5
6.4 Conditioning of test specimens.....	5
6.5 Testing low resistance specimens	5
7 Procedure	6
7.1 Test conditions	6
7.2 Preparation of specimen and test assembly.....	7
7.3 Test procedure	7
8 Calculation and expression of results	8
8.1 Mass change rate	8
8.2 Density of water vapour flow rate.....	9
8.3 Water vapour permeance	9
8.4 Water vapour resistance	10
8.5 Water vapour permeability.....	10
8.6 Water vapour resistance factor	10
8.7 Water vapour diffusion-equivalent air layer thickness.....	11
9 Accuracy of measurement	11
9.1 General.....	11
9.2 Specimen area.....	11
9.3 Specimen thickness	11
9.4 Sealants.....	12
9.5 Weighing precision	12
9.6 Control of environmental conditions	12
9.7 Variations in barometric pressure during test.....	12
10 Test report	12
Annex A (normative) Methods suitable for self-supporting materials	14
Annex B (normative) Methods suitable for loose fills	16
Annex C (normative) Methods suitable for membranes and foils	18

Annex D (normative) Methods suitable for mastics and sealants	19
Annex E (normative) Methods suitable for paint, varnishes, etc.	21
Annex F (normative) Correction for the effect of a masked edge of a specimen	22
Annex G (normative) Correction for resistance of air layers	23
Annex H (normative) Method for calculating the water vapour resistance of the air layer in the cup	24
Annex I (informative) Weighing repeatability, weighing interval and specimen size needed to achieve desired accuracy	25
Annex J (informative) Conversion table for water vapour transmission units	26
Bibliography	27

Foreword

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This second edition cancels and replaces the first edition (ISO 12572:2001), which has been technically revised with the following changes:

- addition of insulation materials in the Scope;
- addition of e) humidity chamber in Clause 5;
- addition of requirements regarding thickness of test specimen to measure the permeability of core materials in 6.2.3;
- change of specimen area size in 6.3;
- addition of requirements for storage time and relative humidity for condition D in 6.4;
- new clause with requirements in 6.5;
- change of requirements for temperature and relative humidity for test conditions in 7.1;
- change of the calculation of mass change rate in 8.1;
- removal of 9.8.

A1 Amendment A1 Foreword

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Hygrothermal performance of building materials and products — Determination of water vapour transmission properties — Cup method

1 Scope

This document specifies a method based on cup tests for determining the water vapour permeance of building products and the water vapour permeability of building materials under isothermal conditions. Different sets of test conditions are specified.

The general principles are applicable to all hygroscopic and non-hygroscopic building materials and products, including insulation materials and including those with facings and integral skins. Annexes give details of test methods suitable for different material types.

The results obtained by this method are suitable for design purposes, production control and for inclusion in product specifications.

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.

There are no normative references in this document.

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 terminological databases for use in standardization at the following addresses:

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

3.1.1

density of water vapour flow rate

mass of water vapour transferred through the specimen per area and per time

3.1.2

homogeneous material

material with properties likely to affect the transmission of water vapour which do not vary on a macroscopic scale

3.1.3

impermeable material

material with a measured *water vapour diffusion-equivalent air layer thickness* (3.1.8) greater than 1 500 m