Hygrothermal performance of building materials and products - Determination of water vapour transmission properties

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 12572:2002 sisaldab Euroopa standardi EN ISO 12572:2001 ingliskeelset teksti.

Käesolev dokument on jõustatud 16.01.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN ISO 12572:2002 consists of the English text of the European standard EN ISO 12572:2001.

This document is endorsed on 16.01.2002 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

Käsitlusala:

This standard specifies a method based on cup tests for determining the steady state water vapour transmission rate, water vapour permeance and water vapour permeability of building materials. Different sets of test conditions are specified.

The general principles are applicable to all hygroscopic and non hygroscopic building materials and products, including those with integral skins and facings. 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 oin product specifications.

Scope:

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Võtmesõnad: heating, mould growth tests, permability measurement, scoring tests, sheets, test specim, testing, testing conditions, tests, thermal insulating materials, thermal protection, vapours, varnishes, water absorption, water permeability, water vapour permeability

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

June 2001



English version

Hygrothermal performance of building materials and products

etermination of water vapour transmission properties (ISO 12572: 2001)

Performance hygrothermique des matériaux et produits pour le bâtiment – Détermination des propriétés de transmission de la vapeur d'eau (ISO 12572 : 2001)

Wärme- und feuchtetechnisches Verhalten von Baustoffen und Bauprodukten – Bestimmung der Wasserdampfdurchlässigkeit (ISO 12572: 2001)

This European Standard was approved by CEN on 2000-10-18.

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 Management Centre or to any CEN member.

The European Standards exist 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

European Committee for Standardization Comité Européen de Normalisation Europäisches Komitee für Normung

Management Centre: rue de Stassart 36, B-1050 Brussels

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Foreword

The text of EN ISO 12572:2001 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 insulation".

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 December 2001, and conflicting national standards shall be withdrawn at the latest by December 2001.

This standard is one of a series of standards which specify test methods for the thermal and moisture related properties of building materials and products.

The annexes A, B, C, D, E, F and G are normative.

The annexes H and J are informative.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This standard 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 those with facings and integral skins. Annexes give details of test methods suitable for different material types. This standard is not applicable in the case of test specimens with water vapour diffusion-equivalent air layer thickness values less than 0,1 m, as a result of increasing uncertainty in the measurement results. If the measured water vapour diffusion-equivalent air layer thickness is greater than 1500 m the material can be considered impermeable.

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

2 Normative reference

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

ISO 9346 Thermal insulation - Mass transfer - Physical quantities and definitions