

Thermal performance of building products and components - Specific criteria for the assessment of laboratories measuring heat transfer properties - Part 2: Measurements by guarded hot plate method

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 1946-2:2001 sisaldab Euroopa standardi EN 1946-2:1999 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 18.06.2001 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1946-2:2001 consists of the English text of the European standard EN 1946-2:1999.</p> <p>This document is endorsed on 18.06.2001 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: This part 2 of this standard provides specific technical criteria for the assessment of laboratories to undertake steady-state heat transfer property measurements by the guarded hot plate method according to prEN 12667 and prEN 12664. It complements the common criteria in part 1. Guidance is given on the organization and contents of the equipment manual, the calibration and maintenance files and the measurement procedure document. It provides information on mandatory equipment performance specifications, equipment description and on calculations for the equipment design and error analysis.</p>	<p>Scope: This part 2 of this standard provides specific technical criteria for the assessment of laboratories to undertake steady-state heat transfer property measurements by the guarded hot plate method according to prEN 12667 and prEN 12664. It complements the common criteria in part 1. Guidance is given on the organization and contents of the equipment manual, the calibration and maintenance files and the measurement procedure document. It provides information on mandatory equipment performance specifications, equipment description and on calculations for the equipment design and error analysis.</p>
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Võtmesõnad: building products, error analysis, heat transfer, hot plate, laboratory assessment, performance check, testing, thermal resistance

ICS 91.100.01; 91.120.10

English version

Thermal performance of building products and components
**Specific criteria for the assessment of laboratories
measuring heat transfer properties**
Part 2: Measurements by guarded hot plate method

Performance thermique des produits et composants pour le bâtiment – Critères particuliers pour l'évaluation des laboratoires mesurant les propriétés de transmission thermique – Partie 2: Mesurages selon la méthode de la plaque chaude gardée

Wärmetechnisches Verhalten von Bauprodukten und Bauteilen – Technische Kriterien zur Begutachtung von Laboratorien bei der Durchführung der Messungen von Wärmeübertragungseigenschaften – Teil 2: Messung nach Verfahren mit dem Plattengerät

This European Standard was approved by CEN on 1998-12-13.

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 Central Secretariat 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 Central Secretariat 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.

CEN

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

Central Secretariat: rue de Stassart 36, B-1050 Brussels

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 89 "Thermal performance of buildings and building components", the secretariat of which is held by SIS.

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 July 1999, and conflicting national standards shall be withdrawn at the latest by July 1999

This European Standard is divided into parts. The first part covers common criteria applicable to all heat transfer property measurements; each subsequent part covers the specific technical criteria applicable to each heat transfer property measurement method described in appropriate standards.

The following parts have been developed:

- Part 1: Common criteria
- Part 2: Measurements by guarded hot plate method
- Part 3: Measurements by heat flow meter method
- Part 4: Measurements by hot box methods
- Part 5: Measurements by pipe test methods

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 part 2 of this standard provides specific technical criteria for the assessment of laboratories to undertake steady-state heat transfer property measurements by the guarded hot plate method according to prEN 12667 and prEN 12664.

It complements the common criteria in part 1. Guidance is given on the organization and contents of the equipment manual, the calibration and maintenance files and the measurement procedure document.

It provides information on mandatory equipment performance specifications, equipment description and on calculations for the equipment design and error analysis.

It provides information on experimental procedures suitable for the assessment of equipment accuracy.

2 Normative references

This 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 standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 1946-1:1999	Thermal performance of building products and components - Specific criteria for the assessment of laboratories measuring heat transfer properties - Part 1: Common criteria
prEN 12664:1996	Building materials - Determination of thermal resistance by means of guarded hot plate and heat flow meter methods - Dry and moist products of medium and low thermal resistance
prEN 12667:1996	Building materials - Determination of thermal resistance by means of guarded hot plate and heat flow meter methods - Products of high and medium thermal resistance
prEN 12939	Building materials - Determination of thermal resistance by means of guarded hot plate and heat flow meter methods - Thick products of high and medium thermal resistance
ISO 8302:1991	Thermal insulation - Determination of steady-state thermal resistance and related properties - Guarded hot plate apparatus

3 Definitions

The definitions in EN 1946-1 and in ISO 8302:1991 also apply to this part of the standard.