

**Hoonete komponendid ja
hoonekonstruktsioonid. Soojustakistus ja
soojusjuhtivus. Arvutusmeetod**

Building components and building elements -
Thermal resistance and thermal transmittance -
Calculation method

EVS

EESTI STANDARDI EESSÕNA**NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN ISO 6946:2008 sisaldab Euroopa standardi EN ISO 6946:2007 ingliskeelset teksti. Standard on kinnitatud Eesti Standardikeskuse 27.02.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas. Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 15.12.2007. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN ISO 6946:2008 consists of the English text of the European standard EN ISO 6946:2007. This standard is ratified with the order of Estonian Centre for Standardisation dated 27.02.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation. Date of Availability of the European standard text 15.12.2007. The standard is available from Estonian standardisation organisation.
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Võtmesõnad: arvutusreeglid, ehitised, elemendid, komponendid, määramine, soojusisolatsioon, soojusjuhtivus, soojuslikud omadused, soojusülekanne

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English Version

Building components and building elements - Thermal
resistance and thermal transmittance - Calculation method (ISO
6946:2007)

Composants et parois de bâtiments - Résistance thermique
et coefficient de transmission thermique - Méthode de
calcul (ISO 6946:2007)

Bauteile - Wärmedurchlasswiderstand und
Wärmedurchgangskoeffizient - Berechnungsverfahren (ISO
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Foreword

This document (EN ISO 6946:2007) 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 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of an identical text or by endorsement, at the latest by June 2008, and conflicting national standards shall be withdrawn at the latest by June 2008.

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Endorsement notice

The text of ISO 6946:2007 has been approved by CEN as a EN ISO 6946:2007 without any modification.

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Introduction

This International Standard provides the means (in part) to assess the contribution that building products and services make to energy conservation and to the overall energy performance of buildings.

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Building components and building elements — Thermal resistance and thermal transmittance — Calculation method

1 Scope

This International Standard provides the method of calculation of the thermal resistance and thermal transmittance of building components and building elements, excluding doors, windows and other glazed units, curtain walling, components which involve heat transfer to the ground, and components through which air is designed to permeate.

The calculation method is based on the appropriate design thermal conductivities or design thermal resistances of the materials and products for the application concerned.

The method applies to components and elements consisting of thermally homogeneous layers (which can include air layers).

This International Standard also provides an approximate method that can be used for elements containing inhomogeneous layers, including the effect of metal fasteners, by means of a correction term given in Annex D. Other cases where insulation is bridged by metal are outside the scope of this International Standard.

2 Normative references

The following referenced documents are indispensable for the application 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 7345, *Thermal insulation — Physical quantities and definitions*

ISO 10456, *Building materials and products — Hygrothermal properties — Tabulated design values and procedures for determining declared and design thermal values*

ISO 13789, *Thermal performance of buildings — Transmission and ventilation heat transfer coefficients — Calculation method*

3 Terms, definitions, symbols and units

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 7345 and ISO 10456 and the following apply.

3.1.1

building element

major part of a building such as a wall, floor or roof