

Thermal insulating products for building applications — Determination of water vapour transmission properties

The European Standard EN 12086:1997 has the status of a
British Standard

ICS 91.100.99; 91.120.10

NO COPYING WITHOUT BSI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW



Document Sharing Hub

National foreword

This British Standard is the English language version of EN 12086:1997.
The UK participation in its preparation was entrusted to Technical Committee B/540/1, European Standards for thermal insulation, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this committee can be obtained on request to its secretary.

This British Standard is one of several general test methods for thermal insulating products for building applications, the EN versions of which are being prepared in CEN/TC 88. This British Standard will be implemented in the United Kingdom, and all conflicting national standards or Parts of standards withdrawn, when the complete series of standards comprising test methods and product specifications has been published.

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN title page, pages 2 to 12 and a back cover.
This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

This British Standard, having been prepared under the direction of the Sector Board for Building and Civil Engineering, was published under the authority of the Standards Board and comes into effect on 15 November 1997

© BSI 10-1999

ISBN 0 580 28611 8

Amendments issued since publication

Amd. No.	Date	Comments

Contents

	Page
National foreword	Inside front cover
Foreword	2
Text of EN 12086	5

ICS 91.100.99

Descriptors: Buildings, thermal insulation, thermal insulating materials, tests, determination, vapour transmission, water vapour, permeability, test conditions, procedure, computation

English version

Thermal insulating products for building applications — Determination of water vapour transmission properties

Produits isolants thermiques destinés aux
applications du bâtiment — Détermination des
propriétés de transmission de la vapeur d'eau

Wärmedämmstoffe für das Bauwesen —
Bestimmung der Wasserdampfdurchlässigkeit

This European Standard was approved by CEN on 1997-04-26. 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

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

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

© 1997 CEN — All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

 **Documents**
Ref. No. EN 12086:1997 E
Document Sharing Hub

Foreword

This European Standard has been prepared by 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 December 1997, and conflicting national standards shall be withdrawn at the latest by December 1997.

This European Standard is one of a series of standards which specify test methods for determining dimensions and properties of thermal insulating materials and products. It supports a series of product standards for thermal insulating materials and products which derive from the Council Directive of 21 December 1988 on the approximation of laws, regulations and administrative provisions of the Member States relating to construction products (Directive 89/106/EEC) through the consideration of the essential requirements.

This European Standard contains the following informative annexes:

Annex A — Conversion table for water vapour transmission units

Annex B — Examples of test assemblies

Annex C — Information about correction procedures

This European Standard has been drafted for applications in buildings but it may also be used in other areas where it is relevant.

In pursuance of Resolution BT 20/1993 Revised, CEN/TC 88 have proposed defining the standards listed below as a European “package” of standards, setting December 31 1997 as the date of withdrawal (dow) of national standards which conflict with the European Standards of this package.

The “package” of standards comprises the following group of inter-related standards on test methods for determining dimensions and properties of thermal insulation materials and products, all of which come within the scope of CEN/TC 88:

EN 822, *Thermal insulating products for building applications — Determination of length and width.*

EN 823, *Thermal insulating products for building applications — Determination of thickness.*

EN 824, *Thermal insulating products for building applications — Determination of squareness.*

EN 825, *Thermal insulating products for building applications — Determination of flatness.*

EN 826, *Thermal insulating products for building applications — Determination of compression behaviour.*

EN 1602, *Thermal insulating products for building applications — Determination of the apparent density.*

EN 1603, *Thermal insulating products for building applications — Determination of dimensional stability under constant normal laboratory conditions (23 °C/50 % relative humidity).*

EN 1604, *Thermal insulating products for building applications — Determination of dimensional stability under specified temperature and humidity conditions.*

EN 1605, *Thermal insulating products for building applications — Determination of deformation under specified compressive load and temperature conditions.*

EN 1606, *Thermal insulating products for building applications — Determination of compressive creep.*

EN 1607, *Thermal insulating products for building applications — Determination of tensile strength perpendicular to faces.*

EN 1608, *Thermal insulating products for building applications — Determination of tensile strength parallel to faces.*

EN 1609, *Thermal insulating products for building applications — Determination of short term water absorption by partial immersion.*

EN 12085, *Thermal insulating products for building applications — Determination of linear dimensions of test specimens.*

EN 12086, *Thermal insulating products for building applications — Determination of water vapour transmission properties.*

EN 12087, *Thermal insulating products for building applications — Determination of long term water absorption by immersion.*

EN 12088, *Thermal insulating products for building applications — Determination of long term water absorption by diffusion.*

EN 12089, *Thermal insulating products for building applications — Determination of bending behaviour.*

EN 12090, *Thermal insulating products for building applications — Determination of shear behaviour.*

EN 12091, *Thermal insulating products for building applications — Determination of freeze-thaw resistance.*