

Acoustics — Measurement of sound insulation in buildings and of building elements using sound intensity —

Part 1: Laboratory measurements

The European Standard EN ISO 15186-1:2003 has the status of a British Standard

ICS 91.120.20

National foreword

This British Standard is the official English language version of EN ISO 15186-1:2003. It is identical with ISO 15186-1:2000.

The UK participation in its preparation was entrusted by Technical Committee EH/1, Acoustics, to Subcommittee EH/1/6, Building acoustics, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/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 subcommittee can be obtained on request to its secretary.

Cross-references

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

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its 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, the EN ISO title page, the EN ISO foreword page, the ISO title page, pages ii to iv, pages 1 to 14, the Annex ZA page and a back cover.

The BSI copyright notice displayed in this document indicates when the document was last issued.

Amendments issued since publication

Amd. No.	Date	Comments
14637	13 October 2003	Implementation of the European Standard

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 15 January 2001

© BSI 13 October 2003

ISBN 0 580 34694 3

English version

**Acoustics - Measurement of sound insulation in buildings and of
building elements using sound intensity - Part 1: Laboratory
measurements (ISO 15186-1:2000)**

Acoustique - Mesurage par intensité de l'isolation
acoustique des immeubles et des éléments de construction
- Partie 1: Mesurages en laboratoire (ISO 15186-1:2000)

Akustik - Bestimmung der Schalldämmung in Gebäuden
und von Bauteilen aus Schallintensitätsmessungen - Teil 1:
Messungen im Prüfstand (ISO 15186-1:2000)

This European Standard was approved by CEN on 2 July 2003.

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.

This European Standard exists 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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

Foreword

The text of ISO 15186-1:2000 has been prepared by Technical Committee ISO/TC 43 "Acoustics" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 15186-1:2003 by Technical Committee CEN/TC 126 "Acoustic properties of building products and of buildings", the secretariat of which is held by AFNOR.

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 January 2004, and conflicting national standards shall be withdrawn at the latest by January 2004.

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, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of ISO 15186-1:2000 has been approved by CEN as EN ISO 15186-1:2003 without any modifications.

NOTE Normative references to International Standards are listed in Annex ZA (normative).

INTERNATIONAL STANDARD

ISO
15186-1

First edition
2000-03-01

Acoustics — Measurement of sound insulation in buildings and of building elements using sound intensity —

Part 1: Laboratory measurements

*Acoustique — Mesurage par intensité de l'isolation acoustique des
immeubles et des éléments de construction —*

Partie 1: Mesurages en laboratoire



Reference number
ISO 15186-1:2000(E)

AVA Documents
Document Sharing Hub

Contents

Page

Foreword.....	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Instrumentation.....	4
5 Test arrangement.....	5
6 Test procedure	6
7 Expression of results	9
8 Test report	9
Annex A (informative) Estimated precision of the method	11
Annex B (informative) Adaption term K_c	12
Bibliography	14

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this part of ISO 15186 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 15186-1 was prepared by Technical Committee ISO/TC 43, *Acoustics*, Subcommittee SC 2, *Building acoustics*.

ISO 15186 consists of the following parts, under the general title *Acoustics — Measurement of sound insulation in buildings and of building elements using sound intensity*:

- *Part 1: Laboratory measurements*
- *Part 2: Field measurements*
- *Part 3: Laboratory measurements at low frequencies*

Annexes A and B of this part of ISO 15186 are for information only.