

**Akustika. Heliisolatsiooni mõõtmine
hoonetes ja hoone osadel. Osa 4:
Ruumidevahelise õhuheli isolatsiooni
välimõõtmised**

Acoustics - Measurement of sound insulation in
buildings and of building elements - Part 4: Field
measurements of airborne sound insulation between
rooms

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 140-4:1999 sisaldab Euroopa standardi EN ISO 140-4:1998 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.11.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 140-4:1999 consists of the English text of the European standard EN ISO 140-4:1998.</p> <p>This document is endorsed on 23.11.1999 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>
--	---

<p>Käsitlusala:</p> <p>Standard esitab meetodid õhuheli isoleerivate omaduste välimõõtmiseks kahe ruumi vahele jäävate siseseinte, põrandate ja uste korral, juhul kui mõlemas ruumis on difuusse helivälja tingimused. Standard määrab kindlaks ka hoone elanikele võimaldatava kaitse.</p>	<p>Scope:</p>
---	----------------------

ICS 91.120.20

Võtmesõnad: akustika, akustilised katsed, akustilised mõõtmised, heliisolatsioon, hooned, katsed, ruumid, välikatsed, õhuheli

ICS 91.120.00

Descriptors: Acoustics, airborne sound insulation, testing.

English version

Acoustics

**Measurement of sound insulation in buildings and
of building elements**

**Part 4: Field measurements of airborne sound insulation between rooms
(ISO 140-4 : 1998)**

Acoustique – Mesurage de l'isolation
acoustique des immeubles et des
éléments de construction – Partie 4:
Mesurage in situ de l'isolement aux
bruits aériens entre les pièces
(ISO 140-4 : 1998)

Akustik – Messung der Schalldäm-
mung in Gebäuden und von Bauteilen –
Teil 4: Messung der Luftschall-
dämmung zwischen Räumen in Ge-
bäuden (ISO 140-4 : 1998)

This European Standard was approved by CEN on 1998-08-14.

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

Foreword

International Standard

ISO 140-4 : 1998 Acoustics – Measurement of sound insulation in buildings and of building elements – Part 4: Field measurements of airborne sound insulation between rooms,

which was prepared by ISO/TC 43 'Acoustic' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 126 'Acoustic properties of building products and of buildings', the Secretariat of which is held by AFNOR, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by February 1999 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

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.

Endorsement notice

The text of the International Standard ISO 140-4 : 1998 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to international publications are listed in Annex ZA (normative).

1 Scope

This part of ISO 140 specifies field methods for measuring the airborne sound insulation properties of interior walls, floors and doors between two rooms under diffuse sound field conditions in both rooms, and for determining the protection afforded to the occupants of the building.

The methods give values for airborne sound insulation which are frequency dependent. They can be converted into a single number, characterizing the acoustic performance, by application of ISO 717-1.

The results obtained can be used to compare sound insulation between rooms and to compare actual sound insulation with specified requirements.

NOTE 1 Laboratory measurements of airborne sound insulation of building elements are dealt with in ISO 140-3.

NOTE 2 Field measurements of airborne sound insulation of façade elements and façades are dealt with in ISO 140-5.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 140. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 140 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 140-2:1991, *Acoustics — Measurement of sound insulation in buildings and of building elements — Part 2: Determination, verification and application of precision data.*

ISO 140-3:1995, *Acoustics — Measurement of sound insulation in buildings and of building elements — Part 3: Laboratory measurements of airborne sound insulation of building elements.*

ISO 354:1985, *Acoustics — Measurement of sound absorption in a reverberation room.*

ISO 717-1:1996, *Acoustics — Rating of sound insulation in buildings and of building elements — Part 1: Airborne sound insulation.*

IEC 60651:1979, *Sound level meters.*

IEC 60804:1985, *Integrating-averaging sound level meters.*