



**SLOVENSKI STANDARD**  
**oSIST prEN ISO 12999-1:2012**  
**01-september-2012**

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**Akustika - Ugotavljanje in uporaba merilne negotovosti v gradbeni akustiki - 1. del:  
Zvočna izolirnost (ISO/DIS 12999-1:2012)**

Acoustics - Determination and application of measurement uncertainties in building acoustics - Part 1: Sound insulation (ISO/DIS 12999-1:2012)

Akustik - Bestimmung und Anwendung der Messunsicherheiten in der Bauakustik - Teil 1: Schalldämmung (ISO/DIS 12999-1:2012)

Acoustique - Détermination et application des incertitudes de mesure dans l'acoustique des bâtiments - Partie 1: Isolation acoustique (ISO/DIS 12999-1:2012)

**Ta slovenski standard je istoveten z: prEN ISO 12999-1**

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**ICS:**

17.140.01	Akustična merjenja in blaženje hrupa na splošno	Acoustic measurements and noise abatement in general
91.120.20	Akustika v stavbah. Zvočna izolacija	Acoustics in building. Sound insulation

**oSIST prEN ISO 12999-1:2012**

**en,fr,de**



EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**DRAFT**  
**prEN ISO 12999-1**

May 2012

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ICS 17.140.01; 91.120.20

English Version

**Acoustics - Determination and application of measurement  
uncertainties in building acoustics - Part 1: Sound insulation  
(ISO/DIS 12999-1:2012)**

Acoustique - Détermination et application des incertitudes  
de mesure dans l'acoustique des bâtiments - Partie 1:  
Isolation acoustique (ISO/DIS 12999-1:2012)

Akustik - Bestimmung und Anwendung der  
Messunsicherheiten in der Bauakustik - Teil 1:  
Schalldämmung (ISO/DIS 12999-1:2012)

This draft European Standard is submitted to CEN members for parallel enquiry. It has been drawn up by the Technical Committee CEN/TC 126.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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 CEN-CENELEC Management Centre has the same status as the official versions.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

**Management Centre: Avenue Marnix 17, B-1000 Brussels**

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## Foreword

This document (prEN ISO 12999-1:2012) has been prepared by Technical Committee ISO/TC 43 "Acoustics" in collaboration with Technical Committee CEN/TC 126 "Acoustic properties of building elements and of buildings" the secretariat of which is held by AFNOR.

This document is currently submitted to the parallel Enquiry.

### Endorsement notice

The text of ISO/DIS 12999-1:2012 has been approved by CEN as a prEN ISO 12999-1:2012 without any modification.

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# DRAFT INTERNATIONAL STANDARD ISO/DIS 12999-1

ISO/TC 43/SC 2

Secretariat: DIN

Voting begins on  
**2012-05-17**Voting terminates on  
**2012-10-17**

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

## Acoustics — Determination and application of measurement uncertainties in building acoustics —

### Part 1: Sound insulation

*Acoustique — Détermination et application des incertitudes de mesure dans l'acoustique des bâtiments —  
Partie 1: Isolation acoustique*

[Revision of second edition (ISO 140-2:1991) and ISO 140-2:1991/Cor.1:1993]

ICS 17.140.01; 91.120.20

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### ISO/CEN PARALLEL PROCESSING

This draft has been developed within the International Organization for Standardization (ISO), and processed under the **ISO-lead** mode of collaboration as defined in the Vienna Agreement.

This draft is hereby submitted to the ISO member bodies and to the CEN member bodies for a parallel five-month enquiry.

Should this draft be accepted, a final draft, established on the basis of comments received, will be submitted to a parallel two-month approval vote in ISO and formal vote in CEN.

**To expedite distribution, this document is circulated as received from the committee secretariat. ISO Central Secretariat work of editing and text composition will be undertaken at publication stage.**

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## 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 2.

The main task of technical committees is to prepare International Standards. 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 document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 12999-1 was prepared by Technical Committee ISO/TC 43, *Acoustics*, Subcommittee SC 2, *Building acoustics*.

This edition cancels and replaces ISO 140-2:1991, which has been technically revised.

ISO 12999 consists of the following parts, under the general title *Acoustics — Determination and application of measurement uncertainties in building acoustics*:

- *Part 1: Sound insulation*
- *Part 2: Sound absorption*

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## Introduction

An assessment of uncertainties which is comprehensible and close to reality is indispensable for many questions in building acoustics. Whether a requirement is met, a laboratory delivers correct results or the acoustic properties of a product are better than the same properties of some other product can be decided only by adequately assessing the uncertainties associated with the quantities under consideration.

Uncertainties should preferably be determined following the principles of the Guide to the Expression of Uncertainty in Measurement. This Guide specifies a detailed procedure for the uncertainty evaluation which is based upon a complete mathematical model of the measurement procedure. At the current knowledge, it seems to be impossible to formulate these models for the different quantities in building acoustics. Therefore, only the principles of such an uncertainty assessment will be explained.

To come to uncertainties all the same, the concept of reproducibility and repeatability is incorporated which is the traditional way of uncertainty determination in building acoustics. This concept offers the possibility to state the uncertainty of a method and of measurements carried out according to the method, based on the results of inter-laboratory measurements.

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