

# **SLOVENSKI STANDARD**

## **SIST EN ISO 10848-3:2006**

**01-julij-2006**

---

**Akustika - Laboratorijsko merjenje bočnega prenosa zvoka v zraku in udarnega zvoka med mejnimi prostori - 3. del: Uporaba lahkih elementov pri bistvenem vplivu stikov (ISO 10848-3:2006)**

Acoustics - Laboratory measurement of the flanking transmission of airborne and impact sound between adjoining rooms - Part 3: Application to light elements when the junction has a substantial influence (ISO 10848-3:2006)

**iTeh STANDARD PREVIEW**  
(standards.iteh.ai)  
Akustik - Messung der Flankenübertragung von Luftschall und Trittschall zwischen benachbarten Räumen in Prüfständen - Teil 3: Anwendung auf leichte Bauteile, wenn die Verbindung wesentlichen Einfluss hat (ISO 10848-3:2006)

[SIST EN ISO 10848-3:2006](https://standards.iteh.ai/catalog/standards/sist/4ce4b4d2-c685-4de0-8bb5-1a20f6e2210a/iso-10848-3-2006)

<https://standards.iteh.ai/catalog/standards/sist/4ce4b4d2-c685-4de0-8bb5-1a20f6e2210a/iso-10848-3-2006>

Acoustique - Mesurage en laboratoire des transmissions latérales du bruit aérien et des bruits de choc entre pièces adjacentes - Partie 3: Application aux éléments légers lorsque la jonction a une influence importante (ISO 10848-3:2006)

**Ta slovenski standard je istoveten z: EN ISO 10848-3:2006**

---

**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

**SIST EN ISO 10848-3:2006**

**en**

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

SIST EN ISO 10848-3:2006

<https://standards.iteh.ai/catalog/standards/sist/4ce4b4d2-c685-4de0-8bb5-f322095fed02/sist-en-iso-10848-3-2006>

EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN ISO 10848-3**

April 2006

ICS 91.120.20

English Version

**Acoustics - Laboratory measurement of the flanking transmission of airborne and impact sound between adjoining rooms - Part 3: Application to light elements when the junction has a substantial influence (ISO 10848-3:2006)**

Acoustique - Mesurage en laboratoire des transmissions latérales du bruit aérien et des bruits de choc entre pièces adjacentes - Partie 3: Application aux éléments légers lorsque la jonction a une influence importante (ISO 10848-3:2006)

Akustik - Messung der Flankenübertragung von Luftschall und Trittschall zwischen benachbarten Räumen in Prüfständen - Teil 3: Anwendung auf leichte Bauteile, wenn die Verbindung wesentlichen Einfluss hat (ISO 10848-3:2006)

This European Standard was approved by CEN on 16 March 2006.

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.

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 Central Secretariat has the same status as the official versions.

<https://standards.iteh.ai/catalog/standards/sist/4ce4b4d2-c685-4de0-8bb5-637695616316/iso-10848-3-2006>

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, 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

**EN ISO 10848-3:2006 (E)****Foreword**

This document (EN ISO 10848-3:2006) has been prepared by Technical Committee CEN/TC 126 "Acoustic properties of building elements and of buildings", the secretariat of which is held by AFNOR, in collaboration with Technical Committee ISO/TC 43 "Acoustics".

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 October 2006, and conflicting national standards shall be withdrawn at the latest by October 2006.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

## **iTeh STANDARD PREVIEW** **(standards.iteh.ai)**

[SIST EN ISO 10848-3:2006](https://standards.iteh.ai/catalog/standards/sist/4ce4b4d2-c685-4de0-8bb5-f322095fed02/sist-en-iso-10848-3-2006)

<https://standards.iteh.ai/catalog/standards/sist/4ce4b4d2-c685-4de0-8bb5-f322095fed02/sist-en-iso-10848-3-2006>

INTERNATIONAL  
STANDARDISO  
10848-3First edition  
2006-04-01

---

---

**Acoustics — Laboratory measurement of  
the flanking transmission of airborne and  
impact sound between adjoining  
rooms —**

Part 3:

**Application to light elements when the  
junction has a substantial influence***Acoustique — Mesurage en laboratoire des transmissions latérales du  
bruit aérien et des bruits de choc entre des pièces adjacentes —**Partie 3: Application aux éléments légers lorsque la jonction a une  
influence importante*Reference number  
ISO 10848-3:2006(E)

© ISO 2006

## ISO 10848-3:2006(E)

**PDF disclaimer**

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

## iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 10848-3:2006

<https://standards.iteh.ai/catalog/standards/sist/4ce4b4d2-c685-4de0-8bb5-f322095fed02/sist-en-iso-10848-3-2006>

© ISO 2006

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

Published in Switzerland

## Contents

Page

Foreword.....	iv
1 Scope .....	1
2 Normative references .....	1
3 Terms and definitions.....	2
4 Measuring equipment.....	3
5 Test arrangement.....	3
5.1 Requirements for the laboratory .....	3
5.2 Installation of the test junction.....	3
5.3 Shielding technique.....	4
6 Test procedures .....	4
7 Precision.....	4
8 Expression of results .....	4
9 Test report .....	5
Annex A (informative) Measurement of $D_{n,f,l}$ and $L_{n,f,l}$ with intensity technique.....	7
Bibliography .....	8

SIST EN ISO 10848-3:2006  
<https://standards.iteh.ai/catalog/standards/sist/4ce4b4d2-c685-4de0-8bb5-f322095fed02/sist-en-iso-10848-3-2006>

## 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 10848-3 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 126, *Acoustic properties of building elements and of buildings*, in collaboration with Technical Committee ISO/TC 43, *Acoustics*, Subcommittee SC 2, *Building acoustics*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

ISO 10848 consists of the following parts, under the general title *Acoustics — Laboratory measurement of the flanking transmission of airborne and impact sound between adjoining rooms*:

- Part 1: Frame document <https://standards.iteh.ai/catalog/standards/sist/4ce4b4d2-c685-4de0-8bb5-f322095fed02/sist-en-iso-10848-3-2006>
- Part 2: Application to light elements when the junction has a small influence
- Part 3: Application to light elements when the junction has a substantial influence

The following part is under preparation:

- Part 4: Application to all other cases



# Acoustics — Laboratory measurement of the flanking transmission of airborne and impact sound between adjoining rooms —

## Part 3:

## Application to light elements when the junction has a substantial influence

### 1 Scope

ISO 10848 specifies measurement methods to be performed in a laboratory test facility in order to characterize the flanking transmission of one or several building components.

The measured quantities can be used to compare different products, or to express a requirement, or as input data for prediction methods, such as EN 12354-1 and EN 12354-2.

This part of ISO 10848 is specifically referred to in ISO 10848-1:2006, 4.4, as being a supporting part to the frame document.

This part of ISO 10848 applies to structurally connected light elements forming a T or X junction. A light element is defined in ISO 10848-1:2006, Clause 3.

The relevant quantity to be measured is selected according to ISO 10848-1:2006, 4.4. The performance of the building components is expressed either as an overall quantity for the combination of elements and junction (such as  $D_{n,f}$  and/or  $L_{n,f}$ ) or as the vibration reduction index  $K_{ij}$  of a junction.  $D_{n,f}$  and  $L_{n,f}$  depend on the actual dimensions of the elements, while  $K_{ij}$  is in principle an invariant quantity.

For general application of the test results,  $D_{n,f}$  and  $L_{n,f}$  are the relevant quantities to measure for lightweight, well-damped types of elements (for example, timber or metal framed stud walls or wooden floors on beams), where the actual situation has no real influence on the sound reduction index and damping of the elements. If the acoustical properties of the elements are substantially influenced by the actual situation,  $K_{ij}$  is the relevant quantity to measure.

### 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 140-2, *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 140-6:1998, *Acoustics — Measurement of sound insulation in buildings and of building elements — Part 6: Laboratory measurements of impact sound insulation of floors*