INTERNATIONAL STANDARD

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Second edition 2017-09

Acoustics — Laboratory and field measurement of flanking transmission for airborne, impact and building service equipment sound between adjoining rooms —

Part 4:

Application to junctions with at least one Type A element

Acoustique — Mesurage en laboratoire et sur le terrain des transmissions latérales du bruit aérien, des bruits de choc et du bruit d'équipement technique de bâtiment entre des pièces —

Partie 4: Application aux jonctions ayant au moins un élément de Type A





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COI	ntents			Page
Fore	word			iv
1	Scope.			1
2	Normative references			1
3	Terms and definitions			1
4	Principle			2
5	Instru	menta	tion	2
6	6.1 6.2 6.3	Requir Requir Installa 6.3.1 6.3.2 6.3.3	ment rements for the laboratory rements for a building structure in the field situation ation of the test junction Type A elements Type B elements Transmission through structures of the test facility or building structure in the field situation	2 3 3 4
7	Test pi	rocedu	res	4
8				
9	Expres	ssion o	f results	4
10	Test re	port		5

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 43, *Acoustics*, Subcommittee SC 2, *Building acoustics*.

This second edition cancels and replaces the first edition (ISO 10848-4:2010), which has been technically revised. The main change is the extension to field measurements.

A list of all the parts in the ISO 10848 series can be found on the ISO website.

Acoustics — Laboratory and field measurement of flanking transmission for airborne, impact and building service equipment sound between adjoining rooms —

Part 4:

Application to junctions with at least one Type A element

1 Scope

ISO 10848 (all parts) specifies measurement methods to characterize the flanking transmission of one or several building components.

This document specifies laboratory and field measurements of buildings where at least one of the elements that form the construction under test is a Type A element (defined in ISO 10848-1).

Laboratory measurements are used to quantify the performance of the junction with suppressed flanking transmission from the laboratory structure. Field measurements are used to characterize the *in situ* performance and it is not usually possible to suppress unwanted flanking transmission sufficiently; hence, the results are primarily representative of the performance of that junction when installed in that particular building structure.

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

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 10848-1:2017, Acoustics — Laboratory and field measurement of flanking transmission for airborne, impact and building service equipment sound between adjoining rooms — Part 1: Frame document

ISO 12999-1, Acoustics — Determination and application of measurement uncertainties in building acoustics — Part 1: Sound insulation

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp