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Acoustics — Field measurement of sound insulation in buildings and of building elements —

Part 1: Airborne sound insulation

*Acoustique — Mesurage in situ de l'isolation acoustique des
bâtiments et des éléments de construction —*

Partie 1: Isolation des bruits aériens



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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.

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).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 43, *Acoustics*, Subcommittee SC 2, *Building acoustics*.

This first edition of ISO 16283-1 cancels and replaces ISO 140-4:1998, ISO 140-5:1998, ISO 140-7:1998, and ISO 140-14:2004, which have been technically revised.

ISO 16283 consists of the following parts, under the general title *Acoustics — Field measurement of sound insulation in buildings and of building elements*:

- *Part 1: Airborne sound insulation*
- *Part 2: Impact sound insulation*¹⁾
- *Part 3: Façade sound insulation*²⁾

1) To be published.

2) Under development.

Introduction

ISO 16283 (all parts) describes procedures for field measurements of sound insulation in buildings. Airborne, impact and façade sound insulation are described in ISO 16283-1, ISO 16283-2³⁾ and ISO 16283-3⁴⁾, respectively.

Field sound insulation measurements that were described previously in ISO 140-4, -5, and -7 were (a) primarily intended for measurements where the sound field could be considered to be diffuse, and (b) not explicit as to whether operators could be present in the rooms during the measurement. ISO 16283 differs from ISO 140-4, -5, and -7 in that (a) it applies to rooms in which the sound field may or may not approximate to a diffuse field, (b) it clarifies how operators can measure the sound field using a hand-held microphone or sound level meter and (c) it includes additional guidance that was previously contained in ISO 140-14.

NOTE Survey test methods for field measurements of airborne and impact sound insulation are dealt with in ISO 10052.

3) To be published.

4) Under development.