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Acoustics — Field measurements of airborne and impact sound insulation and of service equipment sound — Survey method

*Acoustique — Mesurages in situ de l'isolement aux bruits aériens et de
la transmission des bruits de choc ainsi que du bruit des
équipements — Méthode de contrôle*



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Foreword

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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.

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ISO 10052 was prepared by the European Committee for Standardization (CEN) 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).

Throughout the text of this document, read "...this European Standard..." to mean "...this International Standard...".

Contents

	Page
Foreword.....	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Single number quantities	7
5 Instrumentation.....	7
6 Test procedure and evaluation.....	8
6.1 General.....	8
6.2 Generation of sound field	8
6.2.1 General.....	8
6.2.2 Airborne sound insulation between rooms	8
6.2.3 Impact sound insulation between rooms.....	9
6.2.4 Airborne sound insulation of façades	9
6.3 Measurement of sound pressure levels	10
6.3.1 Airborne and impact sound insulation between rooms	10
6.3.2 Airborne sound insulation of façades	10
6.3.3 Service equipment sound pressure level.....	11
6.4 Frequency range of measurements	11
6.5 Reverberation index data	11
6.6 Precision.....	14
7 Expression of results	14
7.1 Airborne sound insulation	14
7.2 Impact sound insulation	14
7.3 Service equipment sound pressure level.....	14
8 Test report	15
Annex A (informative) Forms for the expression of results.....	17
Annex B (normative) Operating conditions and operating cycles for measuring the maximum sound pressure level and the equivalent continuous sound pressure level	23
B.1 General principles.....	23
B.1.1 General.....	23
B.1.2 Maximum sound pressure level (L_{max}).....	23
B.1.3 Equivalent continuous sound pressure level (L_{eq}).....	23
B.2 Water installations	23
B.2.1 General operating conditions.....	23
B.2.2 Water tap.....	24
B.2.3 Shower cabin.....	25
B.2.4 Bath (tub)	25
B.2.5 Filling and emptying sinks and baths.....	25
B.2.6 Water closet (Toilet).....	26
B.3 Mechanical ventilation	26
B.4 Heating and cooling service equipment.....	27
B.5 Lift (Elevator).....	27
B.6 Rubbish chute	28
B.7 Boilers, blowers, pumps and other auxiliary service equipment	28
B.8 Motor driven car park door	28
B.9 Other types of building service equipment.....	29
Bibliography	30

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Foreword

This document (EN ISO 10052:2004) has been prepared by Technical Committee CEN/TC 126 "Acoustic properties of building products 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 June 2005, and conflicting national standards shall be withdrawn at the latest by June 2005.

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, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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Introduction

This document describes survey test methods which can be used for surveying the acoustic characteristics of the airborne sound insulation, impact sound insulation and of the sound pressure levels from service equipment. The methods may be used for screening tests of the acoustical properties of buildings. The methods are not intended to be applied for measuring acoustical properties of building elements.

The approach of the survey methods is to simplify the measurement of sound pressure levels in rooms by using a hand-held sound level instrument and by manually sweeping the microphone in the room space. The correction for reverberation time can be either estimated by usage of tabular values or be based on measurements. The measurement of airborne and impact sound insulation is carried out in octave bands. For measuring sound from domestic service equipment, *A* - or *C* -weighted sound pressure levels are recorded.

Measurements are performed with specified operation conditions and operation cycles. The operating conditions and operating cycles given in Annex B are only used if they are not opposed to national requirements and regulations.

The measurement uncertainty of the results obtained using the survey method is a priori larger than the uncertainty inherent in the corresponding test methods on engineering level.

NOTE Engineering methods for field measurements of airborne and impact sound insulation are dealt with in EN ISO 140-4 and EN ISO 140-7. Engineering methods for field measurements of airborne sound insulation of façade elements and façades are dealt with in EN ISO 140-5. An engineering method for measurement of service equipment sound is dealt with in EN ISO 16032.