
Akustika - Ugotavljanje zvočno izolacijskih lastnosti okrovov - 2. del: Terenska merjenja (za prevzem in preverjanje) (ISO 11546-2:1995)

Acoustics - Determination of sound insulation performances of enclosures - Part 2: Measurements in situ (for acceptance and verification purposes) (ISO 11546-2:1995)

Akustik - Bestimmung der Schalldämmung von Schallschutzkapseln - Teil 2: Messungen im Einsatzfall (zum Zweck der Abnahme und Nachprüfung) (ISO 11546-2:1995)

Acoustique - Détermination de l'isolement acoustique des encoffrements - Partie 2: Mesurages sur site (aux fins d'acceptation et de vérification) (ISO 11546-2:1995)

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Acoustics - Determination of sound insulation performances of enclosures - Part 2: Measurements in situ (for acceptance and verification purposes) (ISO 11546-2:1995)

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European Committee for Standardization
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EN ISO 11546-2:1995

Foreword

The text of the International Standard ISO 11546-2:1995 has been prepared by the Technical Committee ISO/TC 43 "Acoustics" in collaboration with the Technical Committee CEN/TC 211 "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of an identical text or by endorsement, at the latest by June 1996, and conflicting national standards shall be withdrawn at the latest by June 1996.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EC Directive(s).

According to the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

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The text of the International Standard ISO 11546-2:1995 has been prepared by Technical Committee ISO/TC 43 "Acoustics", in collaboration with the Technical Committee CEN/TC 211 "Acoustics", the secretariat of which is held by DS.

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NOTE: Normative references to international publications are listed in annex ZA (normative).

Annex ZA (normative)
Normative references to international publications
with their relevant European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN</u>	<u>Year</u>
ISO 3743-1	1994	Acoustics - Determination of sound power levels of noise sources - Engineering methods for small, movable source in reverberant fields - Part 1: Comparison method for hard walled test rooms	EN ISO 3743-1	1995
ISO 3744	1994	Acoustics - Determination of sound power levels of noise sources - Engineering method in an essentially free field over a reflecting plane	EN ISO 3744	1995
ISO 3746	1994	Acoustics - Determination of sound power levels of noise sources - Survey method using an enveloping measurement surface over a reflecting plane	EN ISO 3746	1995
ISO 9614-1	1993	Acoustics - Determination of sound power levels of noise sources using sound intensity	EN ISO 9614-1	1995
ISO 11201	1995	Acoustics - Noise emitted by machinery and equipment - Measurement of emission sound pressure levels at a work station and at other specified positions - Engineering method in an essentially free field over a reflecting plane	EN ISO 11201	1995
ISO 11202	1995	Acoustics - Noise emitted by machinery and equipment - Measurement of emission sound pressure levels at a work station and at other specified positions - Survey method <i>in situ</i>	EN ISO 11202	1995
ISO 11204	1995	Acoustics - Noise emitted by machinery and equipment - Measurement of emission sound pressure levels at a work station and at other specified positions - Method requiring environmental corrections	EN ISO 11204	1995

INTERNATIONAL
STANDARD

ISO
11546-2

First edition
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**Acoustics — Determination of sound
insulation performances of enclosures —**

Part 2:

Measurements *in situ* (for acceptance and
verification purposes)

SIST EN ISO 11546-2:1997

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Acoustique — Détermination de l'isolement acoustique des
encoffrements —

Partie 2: Mesurages sur site (aux fins d'acceptation et de vérification)



Reference number
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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.

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.

International Standard ISO 11546-2 was prepared by Technical Committee ISO/TC 43, *Acoustics*, Subcommittee SC 1, *Noise*.

ISO 11546 consists of the following parts, under the general title *Acoustics — Determination of sound insulation performances of enclosures*:

- Part 1: *Measurements under laboratory conditions (for declaration purposes)*
- Part 2: *Measurements in situ (for acceptance and verification purposes)*

Annex A forms an integral part of this part of ISO 11546. Annexes B, C, D and E are for information only.

Acoustics — Determination of sound insulation performances of enclosures —

Part 2:

Measurements *in situ* (for acceptance and verification purposes)

1 Scope

This part of ISO 11546 specifies *in situ* methods for the determination of the sound insulation performance (insertion loss) of machine enclosures.

It applies to a total enclosure only and not to the individual panels from which the enclosure is made.

NOTES

1 Sound insulation for enclosure panels such as wall elements, doors, windows, silencers, etc. should be measured in accordance with other relevant standards.

2 Related standards concern noise-attenuation measurements of enclosures under laboratory conditions (ISO 11546-1) and cabins (ISO 11957).

The measurement methods specified in this part of ISO 11546 are based on International Standards in the series ISO 3740, ISO 9614 and ISO 11200 (see table 1). Depending on the method chosen, the sound insulation performance (insertion loss) of the enclosure is determined in terms of the reduction of sound power level or sound pressure level. Methods are given for measurements where the enclosure surrounds the actual sound source (machine). When these methods are not practicable, alternative measurements can be performed with an artificial sound source. Such methods are also described in this part of ISO 11546.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 11546. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 11546 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 140-6:1978, *Acoustics — Measurement of sound insulation in buildings and of building elements — Part 6: Laboratory measurements of impact sound insulation of floors.*

ISO 717-1:—¹⁾, *Acoustics — Rating of sound insulation in buildings and of building elements — Part 1: Airborne sound insulation.*

ISO 3743-1:1994, *Acoustics — Determination of sound power levels of noise sources — Engineering methods for small, movable sources in reverberant fields — Part 1: Comparison method for hard-walled test rooms.*

ISO 3744:1994, *Acoustics — Determination of sound power levels of noise sources using sound pressure — Engineering method in an essentially free field over a reflecting plane.*

1) To be published. (Revision of ISO 717-1:1982 and ISO 717-3:1982)