SLOVENSKI STANDARD
SIST EN ISO 10140-3:2010/oprA2:2013

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Akustika - Laboratorijsko merjenje zvočne izolirnosti gradbenih elementov - 3. del: Merjenje izolirnosti pred udarnim zvokom - Dopolnilo A2 (ISO 10140-3:2010/DAM 2:2013)

Acoustics - Laboratory measurement of sound insulation of building elements - Part 3: Measurement of impact sound insulation - Amendment 2 (ISO 10140-3:2010/DAM 2:2013)

Akustik - Messung der Schalldämmung von Bauteilen im Prüfstand - Teil 3: Messung der Trittschalldämmung - Änderung 2 (ISO 10140-3:2010/DAM 2:2013)

Acoustique - Mesurage en laboratoire de l'isolation acoustique des éléments de construction - Partie 3: Mesurage de l'isolation au bruit de choc - Amendement 2 (ISO 10140-3:2010/DAM 2:2013)

Ta slovenski standard je istoveten z: **EN ISO 10140-3:2010/prA2**

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

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DRAFT AMENDMENT
ISO 10140-3:2010/DAM 2

ISO/TC **43**/SC **2** Secretariat: **DIN**

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Acoustics — Laboratory measurement of sound insulation of building elements —

Part 3:
Measurement of impact sound insulation

AMENDMENT 2

Acoustique — Mesurage en laboratoire de l'isolation acoustique des éléments de construction —

Partie 3: Mesurage de l'isolation au bruit de choc

AMENDEMENT 2

ICS: 91.120.20

ISO/CEN PARALLEL PROCESSING

This draft has been developed within the International Organization for Standardization (ISO), and processed under the **ISO lead** mode of collaboration as defined in the Vienna Agreement.

This draft is hereby submitted to the ISO member bodies and to the CEN member bodies for a parallel five month enquiry.

Should this draft be accepted, a final draft, established on the basis of comments received, will be submitted to a parallel two-month approval vote in ISO and formal vote in CEN.

To expedite distribution, this document is circulated as received from the committee secretariat. ISO Central Secretariat work of editing and text composition will be undertaken at publication stage.

Reference number
ISO 10140-3:2010(E)/DAM 2

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.

Amendment 2 to ISO 10140-3:2010 was prepared by Technical Committee ISO/TC 43, *Acoustics*, Subcommittee SC 2, *Building acoustics*.

Acoustics — Laboratory measurement of sound insulation of building elements — Part 3: Measurement of impact sound insulation - Amendment 2

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Add the following new sub-clause as A.4.5.

A.4.5 Standardized maximum impact sound pressure level $L_{i,Fmax,V,T}$

The room-averaged maximum impact sound pressure level $L_{i,Fmax}$ that is measured in the receiving room below the floor depends on the volume of the receiving room and its reverberation time.

For comparison of laboratory measurements with results in other laboratories or in actual buildings, the result should be corrected using equation (A.3)

$$L_{i,F\max,V,T} = L_{i,F\max} + 10\lg\frac{V}{V_0} - 10\lg\left(Corr_T\right) \quad \text{(A.3)}$$

where $Corr_T$ depends on the reverberation time T_j in each case according to equation (A.4)

$$Corr_T = \frac{1-C_0^{-1}}{1-C^{-1}} \cdot \left(\frac{C^{\left(1-C^{-1}\right)^{-1}} - C^{-\left(1-C^{-1}\right)^{-1}}}{C_0^{\left(1-C_0\right)^{-1}} - C_0^{-\left(1-C_{T_0}^{-1}\right)^{-1}}} \right) \quad \text{(A.4)}$$

$$C_o = \frac{T_0}{13{,}82 \cdot RC} \quad \text{(A.5)}$$

$$C = \frac{T}{13{,}82 \cdot RC} \quad \text{(A.6)}$$

Where

T is the reverberation time in the receiving room;

T_0 is the reference reverberation time; for dwellings, T_0= 0,5 s;

V is the receiving room volume, in cubic metres;

V_0 is the reference receiving room volume, for dwellings, V_0 =50 m^3;

RC is the time constant (0,125 s) for the fast setting

To provide results in readily-comparable form, the measured impact sound pressure levels from a laboratory evaluation following the procedure of this annex should be standardized. The standardized maximum impact sound pressure level $L_{i,Fmax,V,T}$ should be calculated using equation (A.3), with room volume V_0 = 50 m^3 and reverberation time T_0 = 0,5 s for the octave or one-third octave frequency bands specified in A.4.3.2.