

**Acoustics - Rating of sound insulation in buildings and
of building elements - Part 2: Impact sound insulation
(ISO 717-2:2013)**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 717-2:2013 sisaldab Euroopa standardi EN ISO 717-2:2013 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 717-2:2013 consists of the English text of the European standard EN ISO 717-2:2013.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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ICS 91.120.20

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English Version

**Acoustics - Rating of sound insulation in buildings and of
building elements - Part 2: Impact sound insulation (ISO 717-
2:2013)**

Acoustique - Évaluation de l'isolement acoustique des
immeubles et des éléments de construction - Partie 2:
Protection contre le bruit de choc (ISO 717-2:2013)

Akustik - Bewertung der Schalldämmung in Gebäuden und
von Bauteilen - Teil 2: Trittschalldämmung (ISO 717-
2:2013)

This European Standard was approved by CEN on 5 January 2013.

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Foreword

This document (EN ISO 717-2:2013) has been prepared by Technical Committee ISO/TC 43 “Acoustics” in collaboration with Technical Committee CEN/TC 126 “Acoustic properties of building elements and of buildings” the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by September 2013, and conflicting national standards shall be withdrawn at the latest by September 2013.

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Endorsement notice

The text of ISO 717-2:2013 has been approved by CEN as EN ISO 717-2:2013 without any modification.

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Introduction

Methods of measurement of impact sound insulation in buildings and of building elements have been standardized in ISO 10140-3 and ISO 140-7. These methods give values for the impact sound insulation which are frequency dependent. The purpose of this part of ISO 717 is to standardize a method whereby the frequency-dependent values of impact sound insulation can be converted into a single number characterizing the acoustical performance.

The method has been widely used since 1968. However, since there is some evidence that it could be improved, a spectrum adaptation term is added and it is recommended that experience be gathered with this.

References to standards which provide data for single-number evaluation are meant to be examples and not complete surveys.

Acoustics — Rating of sound insulation in buildings and of building elements —

Part 2: Impact sound insulation

1 Scope

This part of ISO 717:

- a) defines single-number quantities for impact sound insulation in buildings and of floors;
- b) gives rules for determining these quantities from the results of measurements carried out in one-third-octave bands in accordance with ISO 10140-3 and ISO 140-7, and in octave bands in accordance with that option in ISO 140-7 for field measurements only;
- c) defines single-number quantities for the impact sound reduction of floor coverings and floating floors calculated from the results of measurements carried out in accordance with ISO 10140-3;
- d) specifies a procedure for evaluating the weighted reduction in impact sound pressure level by floor coverings on lightweight floors.

The single-number quantities in accordance with this part of ISO 717 are intended for rating impact sound insulation and for simplifying the formulation of acoustical requirements in building codes. An additional single-number evaluation in steps of 0,1 dB is indicated for the expression of uncertainty (except for spectrum adaptation terms). The required numerical values of the single-number quantities are specified according to varying needs.

The rating of results from measurements carried out over an enlarged frequency range is described in [Annex A](#).

A method for obtaining single-number quantities for bare heavy floors according to their performance in combination with floor coverings is described in [Annex B](#).

An example of the calculation of a single-number quantity is given in [Annex C](#).

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 140-7:1998, *Acoustics — Measurement of sound insulation in buildings and of building elements — Part 7: Field measurements of impact sound insulation of floors*

ISO 10140-1, *Acoustics — Laboratory measurement of sound insulation of building elements — Part 1: Application rules for specific products*

ISO 10140-3:2010, *Acoustics — Laboratory measurement of sound insulation of building elements — Part 3: Measurement of impact sound insulation*

ISO 10140-5, *Acoustics — Laboratory measurement of sound insulation of building elements — Part 5: Requirements for test facilities and equipment*