

# SLOVENSKI STANDARD SIST EN ISO 10140-4:2021

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Nadomešča:

SIST EN ISO 10140-4:2010

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## Akustika - Laboratorijsko merjenje zvočne izolirnosti gradbenih elementov - 4. del: Merilni postopki in zahteve (ISO 10140-4:2021)

Acoustics - Laboratory measurement of sound insulation of building elements - Part 4:  
Measurement procedures and requirements (ISO 10140-4:2021)

Akustik - Messung der Schalldämmung von Bauteilen im Prüfstand - Teil 4:  
Messverfahren und Anforderungen (ISO 10140-4:2021)

Acoustique - Mesurage en laboratoire de l'isolation acoustique des éléments de  
construction - Partie 4: Exigences et modes opératoires de mesurage (ISO 10140-  
4:2021)

Ta slovenski standard je istoveten z: **EN ISO 10140-4:2021**

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### **ICS:**

17.140.01	Akustična merjenja in blaženje hrupa na splošno	Acoustic measurements and noise abatement in general
91.060.01	Stavbni elementi na splošno	Elements of buildings in general
91.120.20	Akustika v stavbah. Zvočna izolacija	Acoustics in building. Sound insulation

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English Version

## Acoustics - Laboratory measurement of sound insulation of building elements - Part 4: Measurement procedures and requirements (ISO 10140-4:2021)

Acoustique - Mesurage en laboratoire de l'isolation  
acoustique des éléments de construction - Partie 4:  
Exigences et modes opératoires de mesurage (ISO  
10140-4:2021)

Akustik - Messung der Schalldämmung von Bauteilen  
im Prüfstand - Teil 4: Messverfahren und  
Anforderungen (ISO 10140-4:2021)

This European Standard was approved by CEN on 24 April 2021.

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## European foreword

This document (EN ISO 10140-4:2021) 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of an identical text or by endorsement, at the latest by November 2021, and conflicting national standards shall be withdrawn at the latest by November 2021.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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**Acoustics — Laboratory measurement  
of sound insulation of building  
elements —**

**Part 4:  
Measurement procedures and  
requirements**

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*Acoustique — Mesurage en laboratoire de l'isolation acoustique des  
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*Partie 4: Exigences et modes opératoires de mesurage*

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## ISO 10140-4:2021(E)

### 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](http://www.iso.org/directives)).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 43, *Acoustics*, Subcommittee SC 2, *Building acoustics*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 126, *Acoustic properties of building elements and of buildings*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 10140-4:2010), which has been technically revised.

The main changes compared to the previous edition are as follows:

- all references in the text have been updated;
- in [Clause 2](#), the normative references have been updated;
- in [Clause 3](#), the terms and definitions have been updated;
- in [4.8](#) first and last paragraph have been edited;
- in [5.3.3](#) the Note has been edited.

A list of all parts in the ISO 10140 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

## Introduction

ISO 10140 (all parts) concerns laboratory measurement of the sound insulation of building elements (see [Table 1](#)).

ISO 10140-1 specifies the application rules for specific elements and products, including specific requirements for the preparation and mounting of the test elements, and for the operating and test conditions. ISO 10140-2 and ISO 10140-3 contain the general procedures for airborne and impact sound insulation measurements, respectively, and refer to this document and ISO 10140-5 where appropriate. For elements and products without a specific application rule described in ISO 10140-1, it is possible to apply ISO 10140-2 and ISO 10140-3. This document contains basic measurement techniques and processes. ISO 10140-5 contains requirements for test facilities and equipment. For the structure of ISO 10140 (all parts), see [Table 1](#).

ISO 10140 (all parts) was developed to improve the layout for laboratory measurements, ensure consistency and simplify future changes and additions regarding mounting conditions of test elements in laboratory and field measurements. ISO 10140 (all parts) aims at presenting a well-written and arranged format for laboratory measurements.

ISO 10140-1 is planned to be updated with application rules for other products.

**Table 1 — Structure and contents of ISO 10140 (all parts)**

Relevant part of ISO 10140	Main purpose, contents and use	Detailed content
ISO 10140-1	It indicates the appropriate test procedure for elements and products. For certain types of element/product, it can contain additional and more specific instructions about quantities and test element size and about preparation, mounting and operating conditions. Where no specific details are included, the general guidelines are according to ISO 10140-2 and ISO 10140-3.	Appropriate references to ISO 10140-2 and ISO 10140-3 and product-related, specific and additional instructions on: <ul style="list-style-type: none"> <li>— specific quantities measured;</li> <li>— size of test element;</li> <li>— boundary and mounting conditions;</li> <li>— conditioning, testing and operating conditions;</li> <li>— additional specifics for test report.</li> </ul>
ISO 10140-2	It gives a procedure for airborne sound insulation measurements according to ISO 10140-4 and ISO 10140-5. For products without specific application rules, it is sufficiently complete and general for the execution of measurements. However, for products with specific application rules, measurements are carried out according to ISO 10140-1, if available.	<ul style="list-style-type: none"> <li>— Definitions of main quantities measured</li> <li>— General mounting and boundary conditions</li> <li>— General measurement procedure</li> <li>— Data processing</li> <li>— Test report (general points)</li> </ul>
ISO 10140-3	It gives a procedure for impact sound insulation measurements according to ISO 10140-4 and ISO 10140-5. For products without specific application rules, it is sufficiently complete and general for the execution of measurements. However, for products with specific application rules, measurements are carried out according to ISO 10140-1, if available.	<ul style="list-style-type: none"> <li>— Definitions of main quantities measured</li> <li>— General mounting and boundary conditions</li> <li>— General measurement procedure</li> <li>— Data processing</li> <li>— Test report (general points)</li> </ul>