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Building Acoustics - Data Dictionary

Táto technická normalizačná informácia obsahuje anglickú verziu CEN/TR 18180:2025.  
This Technical standard information includes the English version of CEN/TR 18180:2025.

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TECHNICAL REPORT

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English Version

**Building Acoustics - Data Dictionary**

Bauakustisches Datenlexikon

This Technical Report was approved by CEN on 9 June 2025. It has been drawn up by the Technical Committee CEN/TC 126.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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**CEN/TR 18180:2025 (E)**

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## **European foreword**

This document (CEN/TR 18180:2025) has been prepared by Technical Committee CEN/TC 126 “*Acoustic properties of building elements and of buildings*”, the secretariat of which is held by AFNOR.

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.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

**CEN/TR 18180:2025 (E)****Introduction**

Data dictionaries that comply with EN ISO 23386:2020 characterize properties in a precise and standardized way through different attributes and attach a unique identifier to the property to allow its computer readable identification for software applications, e.g. the use of building acoustic properties in user interfaces can be kept concise and still well defined through computer readable links via these properties connected unique identifiers to the building acoustic data dictionary.

In the digital built environment, there will not be a single data dictionary which comprises all the definitions which are needed in all BIM domains. Different groups, possibly in different countries, will create or have created separate data dictionaries, specialized for their needs, based on the legislation and culture regarding their domain. We are, and will be faced with, various separate data dictionaries.

For the future of BIM, it is important to ensure that these data dictionaries can be interoperable in tools and applications.

- The elements of the data dictionaries need to be described by the same attributes. If this is agreed and done by all data dictionary providers, it is quite simple to map properties in one data dictionary to properties in other data dictionaries. This can lead to reuse of properties and to harmonization of properties across data dictionaries. In addition, this is an important step to allow BIM applications to use a set of data dictionaries in a common way.
- The governance of the data dictionaries needs to follow the same rules with respect to the building and development of the data dictionaries' content.

The assumption is that whilst the data dictionaries are independent from each other, they are connected in a coordinated network of data dictionaries (again, there exists several of these networks). Within the network, the data dictionaries are related, which is visible, for instance, using a specific attribute which maps properties and groups of properties of different data dictionaries to each other. Any data dictionary in the network of coordinated data dictionaries is independent, i.e. it has its own processes and committees to control the development and evolution of the data dictionary; meanwhile, they all follow the same description and governance rules described in this document.

The standard EN ISO 23386 specifies the attributes to define properties and groups of properties of single data dictionaries as well as the processes and commissions/roles for the governance of a single data dictionary in a network of coordinated data dictionaries.

The unambiguous mapping and description of properties improves the data quality, reduces misinterpretations and the processing time in digital environments. This document contributes to ensure the quality and the unicity of building acoustic property descriptions in an acoustic data dictionary and to avoid the creation of duplicates.

As the IT-formulation is important, imposed formats (e.g. in examples) in this Technical Report are written in *italic* to differentiate them more clearly from the rest of the text. The *italic* notation itself, character size or type are not part of the imposed IT-format in data dictionaries.

## **1 Scope**

This document clarifies, provides and describes the building acoustic properties to be used in a building acoustic data dictionary. Each acoustic property is defined by its attributes as described in EN ISO 23386:2020. The list of building acoustic properties with their attribute definitions is given in the annex of this document. This list provides the essential, needed properties to design and to describe building acoustic performance of common building elements and buildings.

These properties are intended to be used as mapping properties for property providers and requesters. The mapping of the identifiers enables the exchange of building acoustic data within different databases.

## **2 Normative references**

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN ISO 23386:2020, *Building information modelling and other digital processes used in construction - Methodology to describe, author and maintain properties in interconnected data dictionaries (ISO 23386:2020)*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**