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Building and civil engineering sealants - Determination of change in mass and volume (ISO 10563:2023)



## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 10563:2023 sisaldab Euroopa standardi EN ISO 10563:2023 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 10563:2023 consists of the English text of the European standard EN ISO 10563:2023.
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 and Accreditation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 05.07.2023.	Date of Availability of the European standard is 05.07.2023.
Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.	The standard is available from the Estonian Centre for Standardisation and Accreditation.

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ICS 91.100.50

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EUROPEAN STANDARD

EN ISO 10563

NORME EUROPÉENNE

EUROPÄISCHE NORM

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Supersedes EN ISO 10563:2017

English Version

## Building and civil engineering sealants - Determination of change in mass and volume (ISO 10563:2023)

Mastics pour bâtiments et ouvrages de génie civil -  
Détermination des variations de masse et de volume  
(ISO 10563:2023)

Hochbau - Fugendichtstoffe - Bestimmung der  
Änderung von Masse und Volumen (ISO 10563:2023)

This European Standard was approved by CEN on 27 June 2023.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

## European foreword

This document (EN ISO 10563:2023) has been prepared by Technical Committee ISO/TC 59 "Buildings and civil engineering works" in collaboration with CCMC.

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 January 2024, and conflicting national standards shall be withdrawn at the latest by January 2024.

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.

This document supersedes EN ISO 10563:2017.

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

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

## Endorsement notice

The text of ISO 10563:2023 has been approved by CEN as EN ISO 10563:2023 without any modification.

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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.

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)).

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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 59, *Buildings and civil engineering works*, Subcommittee SC 8, *Sealants*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/SS B02, *Structures*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This fourth edition cancels and replaces the third edition (ISO 10563:2017), of which it constitutes a minor revision. The changes are as follows:

- the title has been revised from *Buildings and civil engineering works — Sealants— Determination of change in mass and volume*;
- “mass and” has been added before “volume” twice in the note in the Scope;
- “shall be taken as the test results” has been replaced by “shall be calculated” in [8.1](#) and [8.2](#);
- the list items in [Clause 9](#) have been revised.

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).

# Building and civil engineering sealants — Determination of change in mass and volume

## 1 Scope

This document specifies a method for the determination of the change of mass and the change of volume of self-levelling and non-sagging sealants used in joints in building construction.

NOTE This test procedure is not intended to determine the absolute maximum value of loss of mass and volume of a tested sealant, but it is an indicative measurement of the loss of mass and volume under specified parameters.

## 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.

ISO 6927, *Building and civil engineering sealants — Vocabulary*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 6927 apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

## 4 Principle

Test specimens consist of either metal rings filled with non-sagging sealant or metal moulds filled with self-levelling sealant. The rings or moulds are weighed in air and in water, before and after filling, before and after specific conditioning. The change in mass and in volume of the tested sealant is calculated.

## 5 Apparatus and materials

**5.1 Rings of non-corrosive metal for non-sagging sealant**, having the following dimensions:

- inner diameter,  $(30 \pm 1)$  mm;
- height,  $(10 \pm 0,1)$  mm.

A hook or loop is fixed to each ring to suspend it from a string for the weighing procedure.

**5.2 Anti-adherent substrate for non-sagging sealant**, for the preparation of test specimens, e.g. wet paper.

**5.3 Moulds of non-corrosive metal for self-levelling sealant**, having the following dimensions:

- inner diameter,  $(30 \pm 1)$  mm;