



**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 10590:2005](#)

<https://standards.iteh.ai/catalog/standards/sist/0600e928-b678-4331-bd05-e5e1a7709d71/sist-en-iso-10590-2005>

EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN ISO 10590**

July 2005

ICS 91.100.50

Supersedes EN ISO 10590:1997

English Version

**Building construction - Sealants - Determination of tensile  
properties of sealants at maintained extension after immersion in  
water (ISO 10590:2005)**

Construction immobilière - Mastics - Détermination des  
propriétés de déformation des mastics sous traction  
maintenue après immersion dans l'eau (ISO 10590:2005)

Hochbau - Fugendichtstoffe - Bestimmung des  
Zugverhaltens unter Vorspannung nach dem Tauchen in  
Wasser (ISO 10590:2005)

This European Standard was approved by CEN on 20 June 2005.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

<https://standards.iteh.ai/catalog/standards/sist/0600e928-b678-4331-bd05-e5e1a7709d71/sist-en-iso-10590-2005>



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

**EN ISO 10590:2005 (E)****Foreword**

This document (EN ISO 10590:2005) has been prepared by Technical Committee ISO/TC 59 "Building construction" in collaboration with CMC.

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of an identical text or by endorsement, at the latest by January 2006, and conflicting national standards shall be withdrawn at the latest by January 2006.

This document supersedes EN ISO 10590:1997.

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

**Endorsement notice**

The text of ISO 10590:2005 has been approved by CEN as EN ISO 10590:2005 without any modifications.

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 10590:2005](https://standards.iteh.ai/catalog/standards/sist/0600e928-b678-4331-bd05-e5e1a7709d71/sist-en-iso-10590-2005)

<https://standards.iteh.ai/catalog/standards/sist/0600e928-b678-4331-bd05-e5e1a7709d71/sist-en-iso-10590-2005>

INTERNATIONAL  
STANDARD

ISO  
10590

Second edition  
2005-07-01

---

---

**Building construction — Sealants —  
Determination of tensile properties of  
sealants at maintained extension after  
immersion in water**

*Construction immobilière — Mastics — Détermination des propriétés de  
déformation des mastics sous traction maintenue après immersion dans  
l'eau*

iTeh STANDARD PREVIEW  
(standards.iteh.ai)

[SIST EN ISO 10590:2005](https://standards.iteh.ai/catalog/standards/sist/0600e928-b678-4331-bd05-e5e1a7709d71/sist-en-iso-10590-2005)

[https://standards.iteh.ai/catalog/standards/sist/0600e928-b678-4331-  
bd05-e5e1a7709d71/sist-en-iso-10590-2005](https://standards.iteh.ai/catalog/standards/sist/0600e928-b678-4331-bd05-e5e1a7709d71/sist-en-iso-10590-2005)



Reference number  
ISO 10590:2005(E)

© ISO 2005

**ISO 10590:2005(E)****PDF disclaimer**

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

## iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN ISO 10590:2005](https://standards.iteh.ai/catalog/standards/sist/0600e928-b678-4331-bd05-e5e1a7709d71/sist-en-iso-10590-2005)

<https://standards.iteh.ai/catalog/standards/sist/0600e928-b678-4331-bd05-e5e1a7709d71/sist-en-iso-10590-2005>

© ISO 2005

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

Published in Switzerland

**Contents**

Page

Foreword.....	iv
1 Scope .....	1
2 Normative references .....	1
3 Terms and definitions.....	1
4 Principle.....	1
5 Apparatus .....	1
6 Preparation of test specimens .....	2
7 Conditioning of test specimens .....	2
8 Test procedure .....	3
9 Test report .....	3

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 10590:2005](https://standards.iteh.ai/catalog/standards/sist/0600e928-b678-4331-bd05-e5e1a7709d71/sist-en-iso-10590-2005)

<https://standards.iteh.ai/catalog/standards/sist/0600e928-b678-4331-bd05-e5e1a7709d71/sist-en-iso-10590-2005>

## ISO 10590:2005(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.

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.

ISO 10590 was prepared by Technical Committee ISO/TC 59, *Building construction*, Subcommittee SC 8, *Joining products*.

This second edition cancels and replaces the first edition (ISO 10590:1991), Clauses 6 and 8 and Table 1 of which have been technically revised.

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 10590:2005](https://standards.iteh.ai/catalog/standards/sist/0600e928-b678-4331-bd05-e5e1a7709d71/sist-en-iso-10590-2005)

<https://standards.iteh.ai/catalog/standards/sist/0600e928-b678-4331-bd05-e5e1a7709d71/sist-en-iso-10590-2005>



# Building construction — Sealants — Determination of tensile properties of sealants at maintained extension after immersion in water

## 1 Scope

This International Standard specifies a method for the determination of the influence of water immersion on the adhesion/cohesion properties at maintained extension of sealants used in joints in building construction.

## 2 Normative references

The following referenced documents are indispensable for the application 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 construction — Jointing product — Sealants — Vocabulary*

ISO 13640, *Building construction — Jointing products — Specifications for test substrates*

## 3 Terms and definitions

SIST EN ISO 10590:2005

[https://standards.iteh.ai/catalog/standards/sist/0600e928-b678-4331-](https://standards.iteh.ai/catalog/standards/sist/0600e928-b678-4331-bd05-e5e1a7709d71/sist-en-iso-10590-2005)

For the purpose of this document, the definitions given in ISO 6927 apply.

## 4 Principle

Preparation of test specimens in which the sealant to be tested adheres to two parallel contact surfaces. Submission of the test specimens to water immersion under defined conditions. Extension of the test specimens to a defined width and maintaining this extension for a defined time. Record any breaks in adhesion or cohesion.

## 5 Apparatus

**5.1 Substrate materials**, used for the preparation of test specimens, are defined in ISO 13640. Select the substrate material(s) from mortar and/or anodized aluminium and/or glass. Other substrate materials may be used as agreed by the parties concerned.

For each test specimen, two substrate pieces of the same material are required with a cross-section of dimensions as shown in Figures 1 and 2. Test substrates of other dimensions may be used, but then the dimensions of the sealant bead and the area of adhesion shall be the same as those shown in Figures 1 and 2.

**5.2 Spacers**, of cross-section (12 mm × 12 mm), for the preparation of test specimens (see Figures 1 and 2), with anti-adherent surface.

**5.3 Anti-adherent substrate**, for the preparation of the test specimens, e.g. polyethylene (PE) film, preferably according to the advice of the sealant manufacturer.