# Ehitamine. Vuugimaterjalid. Elastse taastumise määramine

Building construction - Jointing products - Determination of elastic recovery



### EESTI STANDARDI EESSÕNA

### NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 27389:2000 sisaldab Euroopa standardi EN 27389:1990 ingliskeelset teksti. Standard on kinnitatud Eesti Standardikeskuse 11.01.2000 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This Estonian standard EVS-EN 27389:2000 consists of the English text of the European standard EN 27389:1990. This standard is ratified with the order of Estonian Centre for Standardisation dated 11.01.2000 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
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UDC 691.587:620.172.22:539.371 Key words: Buildings, Joints, Sealing materials, Putty, Tests, Determination, Elastic aftereffect **English version** Buildina construction - Jointing products -Determination of elastic recovery (ISO 7389:1987) Construction immobilière -Produits Hochbau - Fugendichtstoffe - Bestimmung pour joints - Détermination de la des Ruckstellvermogens (ISO 7389:1987) reprise élastique (ISO 7389:1987 This European Standard was accepted by CEN on 1990-05-21 and is identical to the ISO standard as referred to. CEN members are bound to comply with the requirements of the CEN/CENELEC Com-mon Rules 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 Central Secretariat or to any CEN member. This European Standard exists in three official Oprsions (English, French, German). A version in any other language made 💯 translation under the responsibility of a CEN member into its own language, and notified to CEN Central Secretariat has the same status as the official versions. CEN members are the national standards organizations of Austria, Belgium, Den-mark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and Dited Kingdom. RODY FLY. CEN European Committee for Standardization Comité Européen de Normalisation Europäisches Komitee für Normung Central Secretariat: rue Bréderode 2, B-1000 Brussels

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#### BRIEF HISTORY

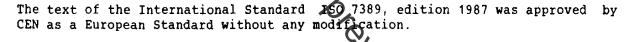
According the proposal of CEN/CS, the Technical Board decided in accordance with the Common CEN/CENELEC Rules, clause 4.2.6, to submit the International Standard

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to the Formal Vote.

In accordance with the Common CEN/CENELEC Rules, the following countries are bound to implement this standard:

Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

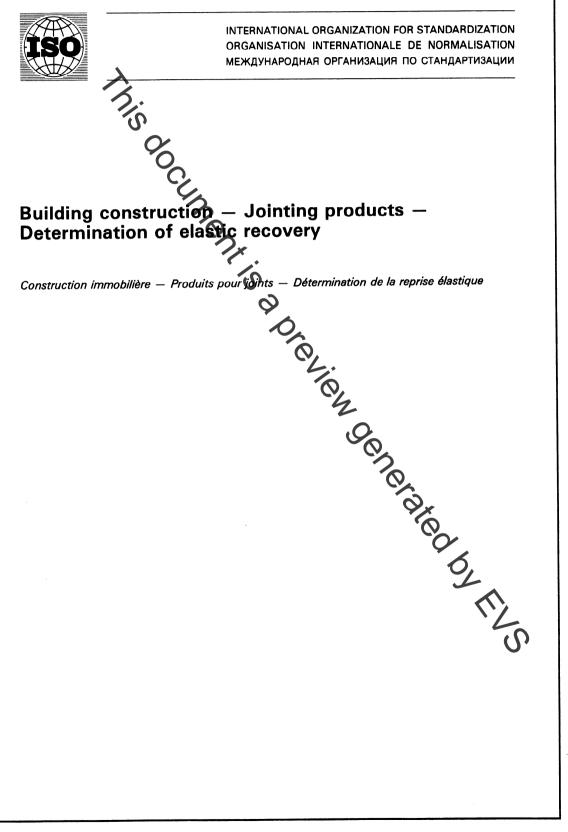


STATEMENT

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## INTERNATIONAL STANDARD





Reference number ISO 7389:1987 (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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 7389 was prepared by Technical Committee ISO/TC 59, Building construction.

This second edition cancels and replaces the first edition (ISO 7389 : 1982), clauses 3.2.2, 3.2.4 and 3.3 of which have been technically revised.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

## Building construction — Jointing products — Determination of elastic recovery

products

Jointing

## 1 Scope and field of application

This International Standard specifies a conventional method for the determination of the elastic receivery of sealants after extension and applies to sealants used in joints in building construction.

### 2 Reference

ISO 6927, Building construction Sealants – Vocabulary.

### 3 Test method

### 3.1 Principle

Extension of specimens of the sealant to be tested which adhere at two parallel contact surfaces to a defined width, maintaining under extension and releasing under defined conditions. The decrease in extension after releasing is the elastic recovery expressed as a percentage (see clause 4).

### 3.2 Apparatus

**3.2.1 U-profiles of non-anodized aluminium alloy**, with a cross-section of dimensions 12 mm  $\times$  12 mm  $\times$  2 mm and a length of 70 mm.

**3.2.2 Spacers,** not adherent to the sealant, for the preparation of the test specimens of dimensions  $12 \text{ mm} \times 12 \text{ mm} \times 10 \text{ mm}.$ 

**3.2.3 Spacers** of appropriate dimensions to hold the test specimens extended by 125, 160 or 200 % of the original width (see the table);

**3.2.4** Anti-adherent substrate, for the preparation of the test specimens, e.g. polytetrafluoroethylene (PTFE) film or vellum paper, preferably according to the advice of the sealant manufacturer.

3.2.5 Glass plate, dusted with talc.

**3.2.6 Convection-type oven**, capable of operating at 70  $\pm$  2 °C.

**3.2.7 Extension machine**, capable of pulling at a rate of 5 to 6 mm/min.

3.2.8 Vernier inside caliper, accurate to 0,1 mm.

3.2.9 Container for water immersion of the specimen.

#### 3.3 Preparation of test specimens

Prepare three test specimens for each extension value to be applied. For each test specimen, assemble two U-profiles<sup>1)</sup> (3.2.1) and two spacers (3.2.2) according to the figure and set them upon the anti-adherent substrate (3.2.4). Fill the hollow space formed by the U-profiles and spacers with sealant which has previously been conditioned for 24 h at 23  $\pm$  2 °C.

following precautions shall be taken :

 $\mathbf{N}_{\mathbf{a}}$ void the formation of air bubbles;

b) press the sealant to the contact surfaces of the U-profiles.

c) trim the sealant surface so that it is flush with the faces of the U-profiles and the spacers.

The test specimens shall be set on edge of one of the supports and the anti-adherent substrate shall be removed as soon as possible. The specimens shall rest in this position to allow curing or optimum drying of the sealant.

The spacers shall be maintained in place during conditioning.

#### 3.4 Conditioning of test specimens

The test specimens shall be conditioned either according to method A (see 3.4.1) or method B (see 3.4.2).

After conditioning according to one of these methods, the test specimens shall be stored for a further period of at least 24 h at 23  $\pm$  2 °C and (50  $\pm$  5) % relative humidity before testing.

<sup>1)</sup> The U-profiles shall be first cleaned with methyl ethyl ketone or similar solvent, then cleaned with a detergent solution and finally rinsed with distilled water and air dried.