# Ehitamine. Tihendusmaterjalid. Nakkeomaduste ja nidususe määramine konstantsel temperatuuril

Building construction - Jointing products - Determination of adhesion/cohesion properties at constant temperature



### EESTI STANDARDI EESSÕNA

### NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 29046:2000 sisaldab Euroopa standardi EN 29046:1990 ingliskeelset teksti. Standard on kinnitatud Eesti Standardikeskuse 11.01.2000 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This Estonian standard EVS-EN 29046:2000 consists of the English text of the European standard EN 29046:1990. 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.
Standard on kättesaadav testi standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.
ICS 91.100.50 hoone vuugid, nake, nidusus, tihendusmaterjalid	
Standardite reprodutseerimis- ja levitamisõigus kuulub Eesti Standardikeskusele	
Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.	
Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega: Aru 10 Tallinn 10317 Eesti; <u>www.evs.ee;</u> Telefon: 605 5050; E-post: <u>info@evs.ee</u>	
Right to reproduce and distribute belongs to the Estonian Centre for Standardisation	
No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without permission in writing from Estonian Centre for Standardisation.	
If you have any questions about standards copyright, please contact Estonian Centre for Standardisation: Aru str 10 Tallinn 10317 Estonia; <u>www.evs.ee;</u> Phone: 605 5050; E-mail: <u>info@evs.ee</u>	

EUROPEAN STANDARD

NORME EUROPEENNE

EUROPAISCHE NORM

November 1990

### UDC 691.587:620.172.222:620.179.4 Key words: Buildings, Joints, Sealing materials, Putty, Tests, Determination, Cohesion, Adhesive strength English version ding construction - Jointing products -Determination of adhesion/cohesion properties at constant temperatures (ISO 9046:1987) Construction immobilière CMastics -Hochbau - Fugendichtstoffe - Bestimmung Détermination des propriétés des Haft- und Dehnverhaltens bei d'adhésivité/ cohésion à température gleichen (ISO 9046:1987) constante (ISO 9046:1987) 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 Common 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 officia Wersions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own landwage and notified to CEN Central Secretariat has the same status as the official versions. CEN members are the national standards organizations of Astria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom. CEN European Committee for Standardization Comité Européen de Normalisation Europäisches Komitee für Normung Central Secretariat: rue Bréderode 2, B-1000 Brussels (c) CEN 1990 Copyright reserved to all CEN members

Ref. No. EN 29 046:1990 E

Page 2 EN 29046:1990

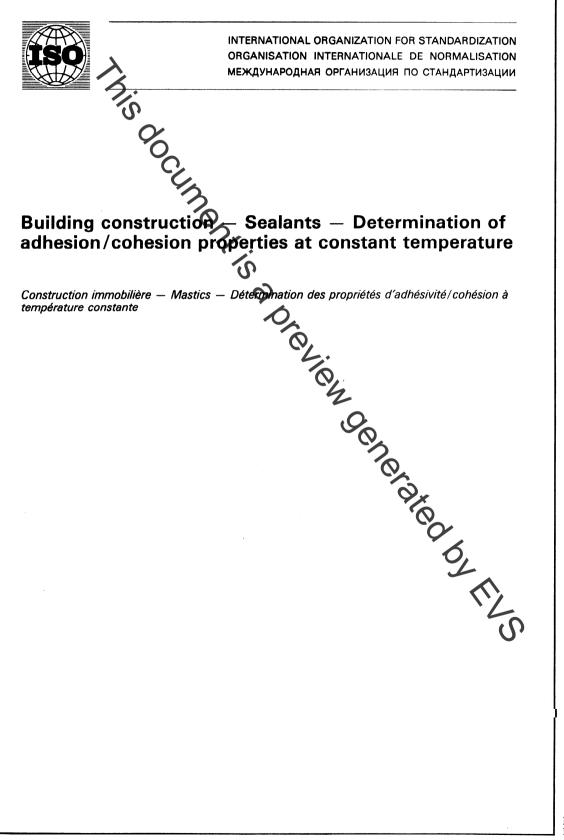
#### BRIEF HISTORY

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

ISO 9046:1987 "Building construction - Sealants - Determination of adhesion/cohesion properties at constant temperature" to the Formal Vote. In accordance with the Common CEN/CENELEC Rules, the following countries are bound to implement this standard: O Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom. STATEMENT o 90. dificat. High Oenerated by the one at the objective of the objective The text of the International Standard 30 9046, edition 1987 was approved by CEN as a European Standard without any modification.

### INTERNATIONAL STANDARD

ISO 9046 First edition 1987-06-01



Reference number ISO 9046 : 1987 (E)

<section-header>prove prove prove

C International Organization for Standardization, 1987 •

Printed in Switzerland

## Building construction – Sealants – Determination of adhesion/cohesion properties at constant temperature

### 1 Scope

This International Standard specifies a method of determining adhesion/cohesion properties of sealants with predominantly plastic behaviour which are used in jointeen building construction.

### 2 Normative reference

The following standard contains provisions which through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard shown below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 6927 : 1981, Building construction — Jointing products — Sealants — Vocabulary.

### 3 Definitions

For the purposes of this International Standard, the definitions given in ISO 6927 apply.

### 4 Principle

Preparation of test specimens and reference specimens in which the sealant to be tested adheres to two parallel contact surfaces. After submission of the test specimens to extension/compression cycles under defined conditions, test specimens and reference specimens are extended to rupture and the force/strain diagrams recorded.

### 5 Apparatus

**5.1 Concrete and/or aluminium supports**, for the preparation of test specimens and reference specimens (two supports are required for each specimen), of dimensions as shown in figures 1 and 2.

**5.2** Spacers, of dimensions  $12 \text{ mm} \times 12 \text{ mm} \times 12,5 \text{ mm}$ , with anti-adherent surface, for the preparation of test specimens and reference specimens (see figures 1 and 2).

 ${\sf NOTE}-{\sf If}$  spacers are made of material to which the sealant adheres, their surfaces should be made anti-adherent, for example by a thin wax coating.

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

**5.4** Test machine with recording device, capable of carrying out extension/compression cycles at a rate of 1 mm/min and an extension of 5,5 mm/min  $\pm$  0,5 mm/min.

5.5 Ventilated convection-type oven, capable of being controlled at 70 °C  $\pm$  2 °C.

## Preparation of test specimens and

Three test specimens and three reference specimens for each support daterial to be used shall be prepared at the same time.

For each best specimen, two supports (5.1) and two spacers (5.2) shall be assembled according to figures 1 and 2 and set up on the anti-adherent substrate (5.3) which should be wetted by water to which detergents have been added to facilitate subsequent removal from the specimens.

The instructions of the sealant manufacturer, for instance whether a primer is to be used, shall be followed.

The hollow volume formed by supports and spacers shall be filled with sealant which has previously been conditioned for 24 h at 23 °C  $\pm$  2 °C. The following precautions shall be taken:

- a) avoid the formation of air bubbles;
- b) press the sealant on the inner surfaces of the supports;
- c) trim the sealant surface so that it is flush with the faces of the supports and spacers.

The test specimens and the reference specimens shall be set on the edge of one of the supports and the anti-adherent substrate shall be removed immediately or whenever possible. The specimens shall rest in this position with the spacers in place for another 48 h to allow reticulation or optimum drying of the sealant.