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Utgåva 1

**Building construction – Jointing products –
Determination of adhesion/cohesion properties
of sealants at constant temperature
(ISO 9046:2002)**

ICS 91.100.50

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Europastandarden EN ISO 9046:2004 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN ISO 9046:2004.

The European Standard EN ISO 9046:2004 has the status of a Swedish Standard. This document contains the official English version of EN ISO 9046:2004.

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Postadress: SIS Förlag AB, 118 80 STOCKHOLM
Telefon: 08 - 555 523 10. *Telefax:* 08 - 555 523 11
E-post: sis.sales@sis.se. *Internet:* www.sis.se

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English version

Building construction - Jointing products - Determination of
adhesion/cohesion properties of sealants at constant
temperature (ISO 9046:2002)

Construction immobilière - Produits pour joints -
Détermination des propriétés d'adhésivité/cohésion des
mastics à température constante (ISO 9046:2002)

Hochbau - Fugendichtstoffe - Bestimmung des Haft- und
Dehnverhaltens von Dichtstoffen bei konstanter
Temperatur (ISO 9046:2002)

This European Standard was approved by CEN on 21 December 2004.

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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.

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

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

Foreword

The text of ISO 9046:2002 has been prepared by Technical Committee ISO/TC 59 "Building construction" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 9046:2004 by 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of an identical text or by endorsement, at the latest by June 2005, and conflicting national standards shall be withdrawn at the latest by June 2005.

This document supersedes EN 29046:1990.

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 9046:2002 has been approved by CEN as EN ISO 9046:2004 without any modifications.

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

1 Scope

This International Standard specifies a method for the determination of the adhesion/cohesion properties of sealants with predominantly plastic behaviour which are used in joints in building construction.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 6927, *Building construction — Jointing products — Sealants — Vocabulary*

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

3 Terms and definitions

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

4 Principle

Test specimens are prepared in which the sealant to be tested adheres to two parallel surfaces. After submission to cycles of compression and extension, the test specimens are examined for evidence of loss of adhesion or cohesion.

5 Apparatus

5.1 Substrate materials, mortar or anodized aluminium or glass, used for the preparation of test specimens are defined in ISO 13640. 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 dimensions as shown in Figures 1 and 2. Test substrates of other dimensions may be used, but the dimensions of the sealant bead and the area of adhesion shall be the same as those shown in Figures 1 and 2.

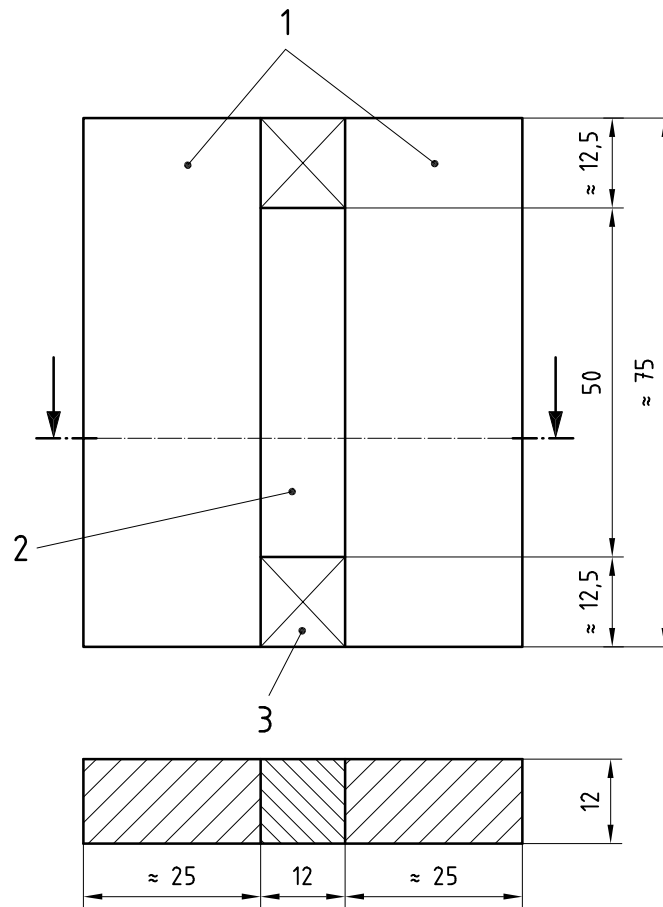
5.2 Spacers, for the preparation of the test specimens, of dimensions 12 mm × 12 mm × ≈ 12,5 mm with anti-adherent surface (see Figures 1 and 2).

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

5.4 Ventilated convection-type oven, capable of being maintained at $(70 \pm 2) ^\circ\text{C}$.

5.5 Container for water immersion of the specimen, for conditioning according to method B.

Dimensions in millimetres



Key

- 1 Mortar substrates
- 2 Sealant
- 3 Spacer

Figure 1 — Test specimen with mortar substrates

5.6 Test machine, capable of carrying out extension/compression cycles at a rate of $(1 \pm 0,2)$ mm/min.

5.7 Measuring device, scaled in 0,5 mm.

6 Preparation of test specimens

The sealant and the substrate shall be brought to (23 ± 2) °C. For each substrate material selected, three test specimens shall be prepared.

For each test specimen, two substrates (5.1) and two spacers (5.2) shall be assembled (see Figures 1 and 2) and set up on the anti-adherent substrate (5.3).

The instructions of the sealant manufacturer concerning, for instance, whether a primer is to be used and the mixing procedure for multi-component sealants shall be followed. The hollow formed by the substrates shall be filled with the sealant.