# Cold applied joint sealants - Part 7: Test method for the determination of the resistance to flame

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### **EESTI STANDARDI EESSÕNA**

### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 14187-
7:2003 sisaldab Euroopa standardi EN
14187-7:2003 ingliskeelset teksti.

Käesolev dokument on jõustatud 14.08.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 14187-7:2003 consists of the English text of the European standard EN 14187-7:2003.

This document is endorsed on 14.08.2003 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

### Käsitlusala:

This European Standard specifies a test method for determination of the resistance to flame of cold applied joint sealants for use in joints in roads, air fields and other exposed concrete pavements

### Scope:

This European Standard specifies a test method for determination of the resistance to flame of cold applied joint sealants for use in joints in roads, air fields and other exposed concrete pavements

**ICS** 13.220.50, 93.080.20

**Võtmesõnad:** cold application, construction, construction materials, flame resistance, health protection, joint filling, joint sealants, joint sealings, occupational safety, road construction, test pieces, testing, testing conditions, testing devices

### EUROPEAN STANDARD NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

EN 14187-8

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### English version

## Cold applied joint sealants - Part 8: Test method for the determination of the artificial weathering by UV-irradiation

Mastics pour joints appliqués à froid - Partie 8: Méthodes d'essai pour la détermination du vieillissement artificiel par rayonnement UV

Kalt verarbeitbare Fugenmassen - Teil 8: Prüfverfahren zur Bestimmung der künstlichen Bewitterung durch UV-Bestrahlung

This European Standard was approved by CEN on 25 March 2003.

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 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 Management Centre has the same status as the official versions.

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



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

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### **Foreword**

This document (EN 14187-8:2003) has been prepared by Technical Committee CEN/TC 227 "Road materials", the secretariat of which is held by DIN.

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 December 2003, and conflicting national standards shall be withdrawn at the latest by March 2005.

This European Standard is one of a series of standards as listed below:

EN 14187-1, Cold applied joint sealants — Part 1: Test method for the determination of the rate of cure.

EN 14187-2, Cold applied joint sealants — Part 2: Test method for the determination of tack free time.

EN 14187-3, Cold applied joint sealants — Part 3: Test method for the determination of self-levelling properties.

EN 14187-4, Cold applied joint sealants — Part 4: Test method for the determination of the change in mass and volume after immersion in test fuel.

EN 14187-5, Cold applied joint sealants — Part 5: Test method for the determination of the resistance to hydrolysis.

EN 14187-6, Cold applied joint sealants — Part 6: Test method for the determination of the adhesion/cohesion properties after immersion in chemical liquids.

EN 14187-7, Cold applied joint sealants — Part 7: Test method for the determination of the resistance to flame.

EN 14187-8, Cold applied joint sealants — Part 8: Test method for the determination of the artificial weathering by UV-irradiation.

prEN 14187-9, Cold applied joint sealants — Part 9: Function test. 1)

No existing European Standard is superseded.

WARNING — Attention is drawn to the health and safety at work and the need to ensure that this test is carried out under suitable environmental conditions to provide adequate protection to persons against the risk of contact or inhalation of toxic products.

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

### 1 Scope

This European Standard describes a test method for evaluating the resistance of cold applied joint sealants to the action of UV-light by determination of the change of physical properties after irradiation by artificial UV-light.

<sup>1)</sup> In preparation.

#### 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 10002-1, Metallic materials — Tensile testing — Part 1: Method of test at ambient temperature.

prEN 13880-12, Hot applied joint sealants – Test methods - Part 12: Manufacture of concrete test blocks for bond testing (recipe methods).

EN ISO 4892-1, Plastics — Methods of exposure to laboratory light sources — Part 1: General guidance (ISO 4892-1:1999).

EN ISO 4892-2, Plastics — Methods of exposure to laboratory light sources — Part 2: Xenon-arc sources (ISO 4892-2:1994).

EN 26927:1990, Building construction - Jointing products - Sealants - Vocabulary (ISO 6927:1981).

EN 28340:1990, Building construction - Jointing products - Sealants - Determination of tensile properties at maintained extension (ISO 8340:1984).

IEC 60085, Thermal evaluation and classification of electrical insulation.

### 3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN 26927:1990 apply.

### 4 Principle

Test specimens of the cured cold applied joint sealant are exposed to artificial light, water or humidity and elevated temperatures under defined conditions and constant elongation.

### 5 Apparatus and materials

- **5.1** Artificial light source with suitable filters, for a simulation of the visible and ultraviolet part of daylight in accordance with IEC 60085. The spectral distribution of radiation shall conform to the requirements of EN ISO 4892-2, method A. The irradiance at the surface of the test specimens at wavelengths of between 290 nm and 800 nm shall be  $(550 \pm 75)$  W/m<sup>2</sup>.
- **5.2** Black standard thermometer according to EN ISO 4892-1 or black panel thermometer. Under given operating conditions black panel thermometers tend to indicate lower temperatures than black standard thermometers, with temperature differences up to 10 K.
- **5.3** Climate chamber, for holding the artificial light source and the test specimens, capable of being maintained at a temperature of  $(45 \pm 2)$  °C and a minimum relative humidity of 95 %.
- **5.4** Concrete supports for the preparation of the test specimens in accordance with prEN 13880-12 of dimensions as shown in Figure 1. Two supports shall be used for each test specimen
- 5.5 Spacers of dimensions 12 mm × 12 mm × 12,5 mm (see Figure 1) for the preparation of test specimens