

Hot applied joint sealants - Part 4: Test method for the determination of heat resistance - Change in penetration value

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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| <p>Käesolev Eesti standard EVS-EN 13880-4:2003 sisaldab Euroopa standardi EN 13880-4:2003 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 14.08.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p> | <p>This Estonian standard EVS-EN 13880-4:2003 consists of the English text of the European standard EN 13880-4:2003.</p> <p>This document is endorsed on 14.08.2003 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p> |
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| <p>Käsitlusala:</p> <p>This European Standard describes a method for determining the effects of storage at elevated temperatures on samples of hot applied joint sealants by comparing the cone penetration and resilience values before and after storage</p> | <p>Scope:</p> <p>This European Standard describes a method for determining the effects of storage at elevated temperatures on samples of hot applied joint sealants by comparing the cone penetration and resilience values before and after storage</p> |
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ICS 93.080.20

Võtmesõnad: ageing (mate, aging, cone penetration, construction, construction materials, definition, definitions, heat ageing tests, heat stability, joint filling, joint sealings, materials, penetration, reset, road construction, testing, testing conditions, thermal stability

English version

**Hot applied joint sealants - Part 4: Test method for the
determination of heat resistance - Change in penetration value**

Produits de scellement de joints appliqués à chaud - Partie
4: Méthode d'essai pour la détermination de la résistance à
la chaleur - Variation de la pénétrabilité

Heiß verarbeitbare Fugenmassen - Teil 4: Prüfverfahren
zur Bestimmung der Wärmebeständigkeit - Änderung der
Konus-Penetration

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.



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Foreword

This document (EN 13880-4:2003) 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:

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| prEN 13880-1 | Hot applied joint sealants — Part 1: Test method for the determination of density at 25 °C |
| prEN 13880-2 | Hot applied joint sealants — Part 2: Test method for the determination of cone penetration at 25 °C |
| EN 13880-3 | Hot applied joint sealants — Part 3: Test method for the determination of penetration and recovery (resilience) |
| EN 13880-4 | Hot applied joint sealants — Part 4: Test method for the determination of heat resistance — Change in penetration value |
| prEN 13880-5 | Hot applied joint sealants — Part 5: Test method for the determination of flow resistance |
| prEN 13880-6 | Hot applied joint sealants — Part 6: Test method for the preparation of samples for testing |
| prEN 13880-7 | Hot applied joint sealants — Part 7: Function testing of joint sealants |
| prEN 13880-8 | Hot applied joint sealants — Part 8: Test method for the determination of the change in weight of fuel resistance joint sealants after fuel immersion |
| EN 13880-9 | Hot applied joint sealants — Part 9: Test method for the determination of compatibility with asphalt pavements |
| prEN 13880-10 | Hot applied joint sealants — Part 10: Test method for the determination of adhesion and cohesion following continuous extension and compression |
| EN 13880-11 | Hot applied joint sealants — Part 11: Test method for the preparation of asphalt test blocks used in the function test and for the determination of compatibility with asphalt pavements |
| prEN 13880-12 | Hot applied joint sealants — Part 12: Test method for the manufacture of concrete test blocks for bond testing (recipe methods) |
| prEN 13880-13 | Hot applied joint sealants — Part 13: Test method for the determination of the discontinuous extension (adherence test) |

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 method for determining the effects of storage at elevated temperatures on samples of hot applied joint sealants by comparing the cone penetration and resilience values before and after storage.

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).

prEN 13880-2:2000, *Hot applied joint sealants — Part 2: Test method for the determination of cone penetration at 25 °C*.

EN 13880-3:2003, *Hot applied joint sealants — Part 3: Test method for the determination of penetration and recovery (resilience)*.

ISO 188, *Rubber, vulcanized or thermoplastic — Accelerated ageing and heat resistance tests*.

3 Term and definition

For the purposes of this European Standard the following term and definition applies:

3.1

change in penetration value

change of the cone penetration and resilience before and after storage at elevated temperature

4 Principle

A portion of the laboratory sample is poured into metal containers to provide the test specimens for examination. Two specimens are placed in a oven at a temperature of $(70 \pm 1) ^\circ\text{C}$ for a period of (168 ± 2) h, then cooled in air and conditioned in the water bath at $(25,0 \pm 0,1) ^\circ\text{C}$. After conditioning, the specimens are tested to determine the cone penetration and resilience values.

The test results obtained before and after storage at elevated temperature are reported according to prEN 13880-2 and EN 13880-3.

5 Apparatus

5.1 Laboratory oven complying with ISO 188 and capable of maintaining the specimens at a temperature of $(70 \pm 1) ^\circ\text{C}$.

6 Procedure

6.1 Cone penetration

Determine the cone penetration before and after storage at elevated temperature according to prEN 13880-2.