

Hot applied joint sealants - Part 7: Function testing of joint sealants

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 13880-7:2003 sisaldab Euroopa standardi EN 13880-7:2003 ingliskeelset teksti. Käesolev dokument on jõustatud 17.09.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 13880-7:2003 consists of the English text of the European standard EN 13880-7:2003. This document is endorsed on 17.09.2003 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.
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Käsitlusala: This European Standard describes a function test for joint sealants intended for use in construction joints as well as in spontaneously formed cracks in road and airfield pavements	Scope: This European Standard describes a function test for joint sealants intended for use in construction joints as well as in spontaneously formed cracks in road and airfield pavements
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ICS 93.080.20

English version

Hot applied joint sealants - Part 7: Function testing of joint sealants

Produits de scellement de joints appliqués à chaud - Partie
7: Test fonctionnel sur scellement de joints

Heiß verarbeitbare Fugenmassen - Teil 7:
Funktionsprüfung von Fugenmassen

This European Standard was approved by CEN on 2 May 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.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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Foreword

This document EN 13880-7:2003 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 February 2004, and conflicting national standards shall be withdrawn at the latest by March 2005.

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.

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

EN 13880-1, *Hot applied joint sealants — Part 1: Test method for the determination of density at 25 °C.*

EN 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.*

EN 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.*

EN 13880-7, *Hot applied joint sealants — Part 7: Function testing of joint sealants.*

EN 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.*

EN 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.*

EN 13880-12, *Hot applied joint sealants — Part 12: Test method for the manufacture of concrete test blocks for bond testing (recipe methods).*

EN 13880-13, *Hot applied joint sealants — Part 13: Test method for the determination of the discontinuous extension (adherence test).*

1 Scope

This European Standard describes a function test for joint sealants intended for use in construction joints as well as in spontaneously formed cracks in road and airfield pavements.

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 13880-6, *Hot applied joint sealants — Part 6: Test method for the preparation of samples for testing*.

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 determination of compatibility with asphalt pavements*.

EN 13880-12, *Hot applied joint sealants — Part 12: Test method for the manufacture of concrete test blocks for bond testing (Recipe methods)*.

prEN 14188-1:2001, *Joint fillers and sealant — Part 1: Specifications for hot applied sealants*.

3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in prEN 14188-1:2001 and the following apply.

3.1

adhesion failures

surface area of the test blocks from which the hot applied joint sealant has completely separated

3.2

cohesion failures

cracks in the superficial areas on the faces of the hot applied joint sealant

4 Principle

This method is intended to serve as an accelerated test for the assessment of damage to hot applied sealants resulting from fluctuating temperatures, water-spraying and simultaneous dynamic loads.

5 Apparatus

5.1 Tensile test rig, which allows the test specimens to be inserted into holding clamps, conveniently and without disturbing the test specimens before, during or after removal. The test rig shall be capable of testing a number of test specimens simultaneously and shall not be significantly affected by the failure of one or more test specimens.

The testing rig shall have the following characteristics:

- be motor driven through positive drives without slip or significant backlash, so that cycles of extension and compression are carried out steadily and automatically;
- be capable of moving the test specimens smoothly and linearly, so that their alignment is maintained at all times without subjecting them to torsion, bending, shock, or significant vibration;
- under the specified conditions in clause 8;
- be capable of measuring and recording the changes in force with an uncertainty of measurement of 2 % after application of the maximum tensile force to each system.