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

EESTI STANDARDIKESKUS
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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 13880-7:2019 sisaldab Euroopa standardi EN 13880-7:2019 ingliskeelset teksti.	This Estonian standard EVS-EN 13880-7:2019 consists of the English text of the European standard EN 13880-7:2019.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 10.04.2019.	Date of Availability of the European standard is 10.04.2019.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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EUROPEAN STANDARD

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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 produits de scellement de joints

Heiß verarbeitbare Fugenmassen - Teil 7: Funktionsprüfung von Fugenmassen

This European Standard was approved by CEN on 25 February 2019.

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 CEN-CENELEC 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

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

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European foreword

This document (EN 13880-7:2019) has been prepared by Technical Committee CEN/TC 227 "Road materials", the secretariat of which is held by BSI.

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 October 2019, and conflicting national standards shall be withdrawn at the latest by October 2019.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 13880-7:2003.

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*

— EN 13880-6, *Hot applied joint sealants — Part 6: 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)*

The following significant changes have been introduced in this edition:

— Accuracy requirements of apparatus have been added.

— Measurement device to measure depth of failures has been added.

— The conditioning procedure has been removed.

— Procedure for sealant type N2 and F2 has been added.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This document describes a function test for hot-applied joint sealants intended to be used in areas where the joints are subjected to combined conditions of temperature ≤ - 20 °C and crack joint movement ≤ 35 % in construction joints as well as in spontaneously formed cracks in road and airfield pavements.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 13880-6, *Hot applied joint sealants - Part 6: Method for the preperation 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 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 14188-1, *Joint fillers and sealants - Part 1: Specifications for hot applied sealants*

ISO 5893, *Rubber and plastics test equipment — Tensile, flexural and compression types (constant rate of traverse) — Specification*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 14188-1 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at http://www.iso.org/obp

3.1
adhesion failures
part of the 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.