



SLOVENSKI STANDARD
kSIST FprEN 14771:2011

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Bitumen in bitumenska veziva – Ugotavljanje upogibne togosti – Reometer z nosilcem, obremenjenim na upogib (BBR)

Bitumen and bituminous binders - Determination of the flexural creep stiffness - Bending Beam Rheometer (BBR)

Bitumen und bitumenhaltige Bindemittel - Bestimmung der Biegekriechsteifigkeit - Biegebalkenrheometer (BBR)

Bitumes et liants bitumineux - Détermination du module de rigidité en flexion - Rhéomètre à flexion de barreau (BBR)

Ta slovenski standard je istoveten z: FprEN 14771

ICS:

75.140	Voski, bitumni in drugi naftni proizvodi	Waxes, bituminous materials and other petroleum products
91.100.50	Veziva. Tesnilni materiali	Binders. Sealing materials

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English Version

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Bitumen und bitumenhaltige Bindemittel - Bestimmung der Biegekriechsteifigkeit - Biegebalkenrheometer (BBR)

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

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Foreword

This document (FprEN 14771:2011) has been prepared by Technical Committee CEN/TC 336 “Bituminous binders”, the secretariat of which is held by AFNOR.

This document is currently submitted to the Unique Acceptance Procedure.

This document will supersede EN 14771:2005.

This European Standard is based on ASTM D 6648-01 [1].

FprEN 14771:2011 (E)

1 Scope

This European Standard specifies a method for the determination of the flexural creep stiffness of bituminous binders in the range of 30 MPa to 1 GPa by means of the bending beam rheometer.

WARNING — The use of this European Standard may involve hazardous materials, operations and equipment. This European Standard does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this European Standard to establish appropriate safety and health practices and to determine the applicability of regulatory limitations prior to use.

2 Normative references

The following referenced documents are indispensable for the application 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 58, *Bitumen and bituminous binders — Sampling bituminous binders*

EN 12594, *Bitumen and bituminous binders — Preparation of test samples*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1 flexural creep stiffness

$S(t)$

ratio obtained by dividing the bending stress by the bending strain

NOTE The strain will increase with the loading time and therefore the flexural creep stiffness will also be a function of time.

3.2 m-value

absolute value of the slope of the curve of the logarithm of the stiffness versus the logarithm of time

3.3 contact load

P_c

load required to maintain positive contact between the test specimen, supports and the loading shaft

NOTE The contact load of 25 mN to 45 mN is used in this method.

3.4 test load

P_t

load used to determine the stiffness of the bituminous binder being tested

NOTE The test load of 930 mN to 1030 mN is used in this method.