

STN	Asfalty a asfaltové spojivá Stanovenie modulu pružnosti pri ohybe Priehybový trámový reometer (BBR)	STN EN 14771 65 7034
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Bitumen and bituminous binders - Determination of the flexural creep stiffness - Bending Beam Rheometer (BBR)

Táto norma obsahuje anglickú verziu európskej normy.

This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 09/23

Obsahuje: EN 14771:2023

Oznámením tejto normy sa ruší

STN EN 14771 (65 7034) z decembra 2012

137370

Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2023

Slovenská technická norma a technická normalizačná informácia je chránená zákonom č. 60/2018 Z. z. o technickej normalizácii v znení neskorších predpisov.

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 14771

July 2023

ICS 75.140; 91.100.50

Supersedes EN 14771:2012

English Version

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

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

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

This European Standard was approved by CEN on 28 May 2023.

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

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European foreword

This document (EN 14771:2023) has been prepared by Technical Committee CEN/TC 336 “Bituminous binders”, the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by January 2024, and conflicting national standards shall be withdrawn at the latest by January 2024.

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 14771:2012.

In comparison with the previous edition, the main technical changes are:

- a) Scope aligned with other test standards;
- b) reference to EN 14023 moved from normative references to bibliography;
- c) Notes in 3.3 and 3.4 updated with reference to SI unit;
- d) wording of test specimen and sample applied consistently;
- e) 5.1.1.1 reworded to provide more clarity;
- f) 5.1.3 Note updated;
- g) former 5.2.1, now 5.3, reworded to provide more clarity;
- h) numbering in Clause 5 aligned with CEN-CENELEC Internal regulations: former 5.2.1, now 5.3;
- i) 6.1 Sample preparation aligned with EN 12594 and reference to scope added in note;
- j) 6.2: reference to plastic films added in Note 2;
- k) 6.2: Note 3 turned into standard text and moved before notes;
- l) 6.3 clarified with regards to pouring, and inconsistencies in the description of storage removed; Note 1 deleted as in conflict with standard text;
- m) text on heated moulds moved from 6.3 to 6.2;
- n) description reworded to provide more clarity; timing of trimming adjusted;
- o) information to discard damaged or distorted test specimen added in 6.3, in c) wording aligned with 5.1.1.1;
- p) information added in 7.1 to place test specimen 5 minutes apart into testing bath, wording aligned;
- q) description of flexural creep stiffness worded more precisely in keys to formulae in 8.2 and 8.3;
- r) writing of decimal logarithm aligned with ISO 80000-2:2019 [6] in 8.3, 8.4 and Annex A;

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- t) Keys in Figures 1 to 4 updated and formatted;
- u) Figure 5: load in legend and in figure renamed as P, also consistent with Formula (1);
- v) Annex A added;
- w) Annex B added;
- x) Bibliography updated with EN 1427.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom

1 Scope

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

The method can be applied to a variety of bitumens, including unmodified as well as modified binders, as fresh (unused) binders, as well as binders after laboratory ageing conditioning (e.g. EN 12607-1, EN 14769), and also binders that have been recovered from asphalt mixtures.

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

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 58, *Bitumen and bituminous binders - Sampling bituminous binders*

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

koniec náhľadu – text ďalej pokračuje v platenej verzii STN