Bituminous mixtures - Test methods - Part 26: Stiffness

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 12697-26:2018+A1:2022 sisaldab Euroopa standardi EN 12697-26:2018+A1:2022 ingliskeelset teksti.	This Estonian standard EVS-EN 12697-26:2018+A1:2022 consists of the English text of the European standard EN 12697-26:2018+A1:2022.
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 and Accreditation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 26.10.2022.	Date of Availability of the European standard is 26.10.2022.
Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.	The standard is available from the Estonian Centre for Standardisation and Accreditation.

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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English Version

Bituminous mixtures - Test methods - Part 26: Stiffness

Mélanges bitumineux - Méthodes d'essai- Partie 26 : Rigidité

Asphalt - Prüfverfahren - Teil 26: Steifigkeit

This European Standard was approved by CEN on 26 February 2018 and includes Amendment 1 approved by CEN on 7 September 2022.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 12697-26:2018+A1:2022) has been prepared by Technical Committee CEN/TC 227 "Road materials", the secretariat of which is held by ▌A1⟩ BSI ⟨A1▌.

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of an identical text or by endorsement, at the latest by April 2023, and conflicting national standards shall be withdrawn at the latest by April 2023.

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

This document includes Amendment 1 approved by CEN on 7 September 2022.

This document supersedes EN 12697-26:2018.

▌A1⟩ *deleted text* ⟨A1▌

The start and finish of text introduced or altered by amendment is indicated in the text by tags ▌A1⟩ ⟨A1▌.

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.

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1 Scope

This European Standard specifies the methods for characterizing the stiffness of bituminous mixtures by alternative tests, including bending tests and direct and indirect tensile tests. The tests are performed on compacted bituminous material under a sinusoidal loading or other controlled loading, using different types of specimens and supports.

The procedure is used to rank bituminous mixtures on the basis of stiffness, as a guide to relative performance in the pavement, to obtain data for estimating the structural behaviour in the road and to judge test data according to specifications for bituminous mixtures.

As this standard does not impose a particular type of testing device the precise choice of the test conditions depends on the operating scope and working range of the device used.

For the choice of specific test conditions, the requirements of the product standards for bituminous mixtures should be respected.

The applicability of this document is described in the product standards for bituminous mixtures.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 12697-6, *Bituminous mixtures - Test methods - Part 6: Determination of bulk density of bituminous specimens*

EN 12697-7, *Bituminous mixtures - Test methods - Part 7: Determination of the bulk density of bituminous specimens by gamma rays*

EN 12697-27, *Bituminous mixtures - Test methods - Part 27: Sampling*

EN 12697-29, *Bituminous mixtures - Test methods - Part 29: Determination of the dimensions of a bituminous specimen*

EN 12697-31, *Bituminous mixtures - Test methods - Part 31: Specimen preparation by gyratory compactor*

EN 12697-33, *Bituminous mixtures - Test method - Part 33: Specimen prepared by roller compactor*

3 Terms, definitions and symbols

3.1 Terms and definitions

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

3.1.1
stiffness modulus
relationship between maximum applied stress and maximum measured strain response and expressed as:

$$E = \frac{\sigma}{\varepsilon} \quad (1)$$