

Bituminous mixtures - Test methods - Part 26: Stiffness

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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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
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Contents	Page
European foreword	5
1 Scope	6
2 Normative references	6
3 Terms, definitions and symbols	6
3.1 Terms and definitions	6
3.2 Symbols.....	8
4 Principle	9
5 Sample preparation	9
5.1 Age of the specimens.....	9
5.2 Drying of the specimens	9
5.3 Dimensions and bulk density of the specimens.....	9
5.4 Number of test specimens.....	10
6 Checking of the testing equipment	10
7 Test methods	10
7.1 General.....	10
7.2 Codification of tests	10
7.2.1 Sinusoidal bending tests.....	10
7.2.2 Indirect tensile test (pulse or cyclic).....	11
7.2.3 Cyclic or monotonous uniaxial tests.....	11
7.2.4 Loading conditions	11
7.2.5 Load amplitudes	11
7.2.6 Loading frequencies.....	11
7.3 Controlled strain rate loading.....	12
7.3.1 Test method	12
7.3.2 Loading conditions	12
7.3.3 Strain amplitudes for direct tensile tests.....	12
8 Temperatures	13
9 Expression of results	13
10 Test report	15
10.1 Introduction	15
10.2 General.....	15
10.3 Information on specimens.....	15
10.4 Information on test method	15
10.5 Information on the test and results.....	16
10.6 Optional information	16
11 Precision	16
Annex A (normative) Two point bending test on trapezoidal specimens (2PB-TR) or on prismatic specimens (2PB-PR)	17
A.1 Principle	17
A.2 Equipment	17

A.3	Specimen preparation	18
A.4	Procedure	19
Annex B (normative)	Three point bending test on prismatic specimens (3PB-PR) and four point bending test on prismatic specimens (4PB-PR).....	20
B.1	Principle.....	20
B.2	Equipment.....	21
B.3	Specimen preparation	22
B.3.1	Dimensions	22
B.3.2	Sample manufacture.....	22
B.4	Procedure.....	23
Annex C (normative)	Test applying indirect tension to cylindrical specimens (IT-CY).....	24
C.1	Principle.....	24
C.2	Equipment.....	24
C.2.1	General devices	24
C.2.2	Test equipment.....	24
C.3	Specimen preparation	29
C.4	Mode of operation	30
C.4.1	Mounting the specimen	30
C.4.2	Stiffness measurement	30
C.4.2.1	Conditioning load pulses.....	30
C.4.2.2	Deformation measuring.....	30
C.4.2.3	Calculation of the stiffness modulus	30
C.4.2.4	Stiffness modulus of the specimen	31
Annex D (normative)	Direct tension-compression test on cylindrical specimens (DTC-CY)	32
D.1	Principle.....	32
D.2	Equipment.....	32
D.3	Specimen preparation	32
D.4	Mode of operation	34
D.4.1	Stabilizing the specimen	34
D.4.2	Procedure	34
Annex E (normative)	Test applying direct tension to cylindrical specimens (DT-CY) or to prismatic specimens (DT-PR)	35
E.1	Principle.....	35
E.2	Equipment.....	35
E.3	Specimen preparation	35
E.3.1	Cylindrical specimen	35
E.3.2	Prismatic specimen.....	36

E.4	Mode of operation.....	36
E.4.1	Stabilization of the specimen.....	36
E.4.1.1	Temperature stabilization.....	36
E.4.1.2	Preliminary mechanical stabilization	36
E.4.1.3	Mechanical stabilization between tests	37
E.4.2	Procedure.....	37
E.5	Derivation of the master-curve - Isotherms.....	38
Annex F (normative)	Test applying cyclic indirect tension to cylindrical specimens (CIT-CY)....	39
F.1	Principle	39
F.2	Equipment	39
F.2.1	Test machine.....	39
F.2.2	Loading.....	39
F.2.3	Displacement.....	39
F.2.4	Thermostatic chamber.....	41
F.2.5	Recording and measuring system.....	41
F.2.6	Loading strips.....	41
F.3	Specimen preparation	41
F.3.1	Test specimen.....	41
F.3.2	Specimen dimensions	42
F.4	Mode of operation.....	42
F.4.1	Test temperature	42
F.4.2	Mounting the specimen.....	42
F.4.3	Procedure.....	42
F.4.3.1	General.....	42
F.4.3.2	Load frequency.....	43
F.4.3.3	Definition of the lower load level	43
F.4.3.4	Definition of the upper load level.....	43
F.4.4	Checking of specimen deterioration	43
Annex G (informative)	Derivation of the master curve	44
G.1	Principle	44
G.2	Theoretical background	45
G.3	Experimental data.....	46
G.4	Test report.....	47

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:

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