

Bituminous mixtures - Test method - Part 33: Specimen prepared by roller compactor

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 12697-33:2019 sisaldab Euroopa standardi EN 12697-33:2019 ingliskeelset teksti.	This Estonian standard EVS-EN 12697-33:2019 consists of the English text of the European standard EN 12697-33:2019.
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.
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English Version

Bituminous mixtures - Test method - Part 33: Specimen prepared by roller compactor

Mélanges bitumineux - Méthodes d'essai - Partie 33 :
Préparation de corps d'épreuve au compacteur de
plaque

Asphalt - Prüfverfahren - Teil 33:
Probestückvorbereitung mittels
Walzverdichtungsgerät

This European Standard was approved by CEN on 19 November 2018.

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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.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Contents	Page
European foreword.....	3
1 Scope.....	4
2 Normative references.....	4
3 Terms and definitions	4
4 Principle	6
5 Apparatus.....	6
5.1 Method using a wheel or two wheels fitted with pneumatic tyres.....	6
5.2 Methods using a smooth steel roller.....	7
5.2.1 Smooth steel roller	7
5.2.2 Steel roller used on wheel fitted with pneumatic tyres	7
5.3 Method using a steel roller sector.....	8
5.3.1 General.....	8
5.3.2 Roller sector.....	8
5.3.3 Compaction mould.....	8
5.3.4 Loading device.....	8
5.3.5 Demoulding facilities.....	8
5.3.6 Other	8
5.4 Method using a roller running on vertical sliding steel plates.....	9
6 Preparation	10
6.1 Mass of bituminous mixture.....	10
6.2 Filling the mould.....	11
7 Compaction procedure.....	11
7.1 Method using wheels fitted with pneumatic tyres.....	11
7.1.1 Test conditions.....	11
7.1.2 Compaction.....	12
7.2 Methods using a smooth steel roller	12
7.2.1 General.....	12
7.2.2 Compaction by a specified energy.....	13
7.2.3 Compaction with controlled compaction energy.....	13
7.2.4 Compaction to obtain a specified air voids content or compaction degree.....	13
7.3 Method using a steel roller sector.....	13
7.3.1 General.....	13
7.3.2 Compaction with combined height-controlled precompaction and force-controlled main-compaction	13
7.3.3 Height-controlled compaction.....	15
7.3.4 Compaction with controlled compaction energy.....	15
7.4 Method using a roller running on vertical sliding steel plates.....	16
7.5 Demoulding of the slab	16
8 Test report.....	16

European foreword

This document (EN 12697-33:2019) 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 September 2019, and conflicting national standards shall be withdrawn at the latest by September 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 12697-33:2003+A1:2007.

The following is a list of significant technical changes since the previous edition:

- the series title no longer makes the method exclusively for hot mix asphalt;
- [Clause 1] Scope clarified. Listed methods named according to the standard for consistency;
- [Clause 3] [3.1] Deleted. Following sub clauses renumbered;
- [3.2] Symbols and abbreviations deleted. Given in relevant clauses;
- [5.2.1.1] Inappropriate definition of moulds for steel wheel rollers deleted;
- [5.2.1.2] Formula (1) corrected;
- [5.3] Method for steel roller sector introduced. Method using a roller running on vertical sliding steel plates now described in new clause [5.4];
- [5.4.4] Hatching for plates in Figure 3 made vertical for clarity;
- [6.2] Pre-heating of the mould and other metallic moveable parts clarified and the pre-heating temperature shall be reported;
- [7.1.1] Distance between twinned wheels clarified by referring to centre lines;
- [7.3] Compaction procedure using steel roller sector introduced. Compaction procedure using a roller running on vertical sliding steel plates now described in new clause [7.4].

A list of all parts in the EN 12697 series 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, 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 specifies the methods for compacting parallelepipedal specimens (slabs) of bituminous mixtures, to be used directly for subsequent testing, or from which test specimens are cut.

For a given mass of bituminous mixture, the specimens are prepared either under controlled compaction energy, or until a specified volume and therefore air voids content is obtained.

This document describes the following methods of compaction:

- method using a wheel or two wheels fitted with pneumatic tyres;
- methods using a steel roller, which includes 3 different procedures:
 - steel roller;
 - steel roller used on wheel fitted with pneumatic tyres;
 - steel roller running on vertical sliding steel plates;
- method using a steel roller sector.

This document is applicable to bituminous mixtures manufactured in the laboratory or in a mixing plant.

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

EN 12697-35, *Bituminous mixtures — Test methods — Part 35: Laboratory mixing*

3 Terms and definitions

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

pass

one forward or one backward motion of the rolling load

3.2

slab axis

axis of symmetry of slab parallel to the largest dimension of the mould

3.3

lateral axis

axis of a pass parallel to largest dimension of a mould; situated at distance a from the slab axis (see Figure 1)