

STN	Asfaltové zmesi Skúšobné metódy Časť 16: Odolnosť proti obrusovaniu pneumatikami s hrotmi	STN EN 12697-16 73 6160
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Bituminous mixtures - Test methods - Part 16: Abrasion by studded tyres

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. 03/25

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EUROPEAN STANDARD
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EN 12697-16

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Supersedes EN 12697-16:2016

English Version

**Bituminous mixtures - Test methods - Part 16: Abrasion by
studded tyres**

Mélanges bitumineux - Méthodes d'essai - Partie 16 :
Abrasion par pneus à crampons

Asphalt - Prüfverfahren - Teil 16: Abrieb durch
Spikereifen

This European Standard was approved by CEN on 25 November 2024.

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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 12697-16:2024) 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of an identical text or by endorsement, at the latest by June 2025, and conflicting national standards shall be withdrawn at the latest by June 2025.

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 12697-16:2016.

EN 12697-16:2024 includes the following significant technical changes with respect to EN 12697-16:2016:

- [2] deletion of “for hot mix asphalt” from the titles of test methods in the EN 12697 series;
- [4.2.1] NOTE deleted;
- [4.2.4] completed paragraph with “Rockwell C-scale” for clarity;
- [4.2.9] revised description of requirement. “Accuracy” amended to “maximum permissible error”;
- [4.3.2] deletion of Clause 4.3.2. Following Clauses re-numbered;
- [4.3.3] clarification of paragraph. Deletion of NOTE. (Clause 4.3.4 in the previous edition);
- [4.7] update of the contents in the test report;
- [5.2.5] introduction of key “A” and “X” to Figure 3;
- [5.2.6], [5.2.7], [5.2.9] “accuracy” amended to “maximum permissible error”;
- [5.3.2] deletion of Clause 5.3.2. Following Clauses re-numbered;
- [5.7] update of the contents in the test report;
- [B.2.1.1] clause title amended to read “Spring balance”. Paragraph amended to clarify that the measuring capacity refers to a balance. Added reference to new sub-Clause B.2.1.2;
- [B.2.1.2] new sub-clause for “Dynamometer” introduced;
- [B.2.1.3] re-numbered sub-clause for “Measuring table”. Previously B.2.1.2;
- [B.2.2.4] NOTE deleted as no longer relevant due to introduction of Clause B.2.1.2;
- [B.2.2.4, Figure B.1] introduction of key “F” to Figure B.1;
- [Bibliography] deleted reference to EN 12697-29, *Bituminous mixtures — Test method for hot mix asphalt — Part 29: Determination of the dimensions of a bituminous specimen*.

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A list of all parts in a series can be found on the CEN website: www.cencenelec.eu.

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 two test methods (method A and method B) for determining the susceptibility of abrasion by studded tyres, tested on cylindrical specimens of bituminous mixtures. The test methods are applicable to bituminous mixtures with aggregate with upper sieve size not exceeding 22 mm.

The tests are applicable to laboratory produced specimens or cores drilled from a slab or pavement.

NOTE 1 Method A originates from the "Prall"-method, which has been improved by comprehensive Nordic research work. The method correlates with abrasion in the field when using paving grade bitumen. According to Nordic experience, by method A the correlation between laboratory and abrasion in field is not established when polymer modified bitumen or rubber modified bitumen, etc. is used.

NOTE 2 Method B originates from Finnish experience and is suitable also when polymer modified bitumen is used. The correlation between laboratory and abrasion in field is not established when rubber is used.

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

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

EN 12697-30, *Bituminous mixtures — Test methods — Part 30: Specimen preparation by impact compactor*

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

EN 12697-32, *Bituminous mixtures — Test methods — Part 32: Specimen preparation by vibratory compactor*

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

ISO 3290-1, *Rolling bearings — Balls — Part 1: Steel balls*

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