

Concrete pavements - Part 4: Test methods for the determination of wear resistance of concrete pavements to studded tyres

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 13863-4:2005 sisaldab Euroopa standardi EN 13863-4:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 25.01.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 13863-4:2005 consists of the English text of the European standard EN 13863-4:2004.</p> <p>This document is endorsed on 25.01.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This European Standard describes a test method for the determination of the wear resistance to studded tyres of specimens cut from hardened concrete pavements or moulded laboratory specimens.</p>	<p>Scope:</p> <p>This European Standard describes a test method for the determination of the wear resistance to studded tyres of specimens cut from hardened concrete pavements or moulded laboratory specimens.</p>
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Võtmesõnad: concrete, construction, construction materials, determination, dimensions, pavements, plates, road construction, roads, specification (approval), specifications, surfacing, surfacing (exterior spaces), test equipment, testing, thickness, thickness measurement

English version

**Concrete pavements - Part 4: Test methods for the
determination of wear resistance of concrete pavements to
studded tyres**

Fahrbahnbefestigungen aus Beton - Teil 4: Prüfverfahren
zur Bestimmung des Widerstandes gegen Verschleiß durch
Spikereifen von Fahrbahnbefestigungen aus Beton

This European Standard was approved by CEN on 2 September 2004.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

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 Central Secretariat has the same status as the official versions.

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Contents

	Page
Foreword.....	3
1 Scope	4
2 Normative references	4
3 Test specimen	4
4 Test equipment	5
5 Preparation of samples	6
6 Procedure	6
7 Report	8
Bibliography	9

Foreword

This document (EN 13863-4:2004) has been prepared by Technical Committee CEN/TC 227 "Road materials", the secretariat of which is held by DIN.

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 May 2005, and conflicting national standards shall be withdrawn at the latest by May 2005.

This European Standard is one of a series concerned with test methods for the functional requirements for concrete pavements.

EN 13863-1, *Concrete pavements — Part 1: Test method for the determination of the thickness of a concrete pavement by survey method.*

EN 13863-2, *Concrete pavements — Part 2: Test method for the determination of the bond between two layers.*

EN 13863-3, *Concrete pavements — Part 3: Test methods for the determination of the thickness of a concrete pavement from cores.*

EN 13863-4, *Concrete pavements — Part 4: Test methods for the determination of wear resistance of concrete pavements to studded tyres.*

No European Standard is superseded.

This document includes a Bibliography.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

1 Scope

This document describes a test method for the determination of the wear resistance to studded tyres of specimens cut from hardened concrete pavements or moulded laboratory specimens.

NOTE The test method is applicable for the finished concrete (end product testing) and not only for the aggregate as described in EN 1097-9. In the report from Swedish Road and Transport Research Institute (1996) "Ring Analysis of Nordic Road Simulators: Proposal for a common test method for the determination of the wear resistance of concrete pavements" more information of the methods precision is given (see Bibliography).

This document describes three proceedings for testing.

2 Normative references

The following referenced documents are indispensable for the application 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 196-6, *Methods of testing cement — Determination of fineness*.

EN 197-1, *Cement — Part 1: Composition, specifications and conformity criteria of common cements*.

EN 1097-9, *Tests for mechanical and physical properties of aggregate — Part 9: Determination of the resistance to wear by abrasion from studded tyres - Nordic test*.

EN 12504-1, *Testing concrete in structures — Part 1: Cored specimens — Testing, examining and testing in compression*.

3 Test specimen

The sample shall consist of at least two specimens. Specimens shall conform to the dimensions in Table 1 according to road testing machines used.

Table 1 — Dimension of specimens

Method	Thickness mm	Width mm	Edge-length mm
Method 1 ^a Trapezoid specimens	250	900	$L_1 = 1\,340$ $L_2 = 1\,810$
Method 2 ^a Half trapezoid specimens	40	480	$L_1 = 580$ $L_2 = 680$
Method 3 ^a Segment	90	300	1 760 (middle line length)
^a See example of road testing machines in the paper referred to in the Bibliography			