

**Mössiga pindamine. Katsemeetodid. Osa 7:
Hõõrdkulumiskatse loksutamisega**

**Slurry surfacing - Test methods - Part 7: Shaking
abrasion test**

EESTI STANDARDI EESSÕNA

See Eesti standard EVS-EN 12274-7:2005 sisaldab Euroopa standardi EN 12274-7:2005 ingliskeelset teksti.

Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.

Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 25.05.2005.

Standard on kättesaadav Eesti Standardikeskusest.

NATIONAL FOREWORD

This Estonian standard EVS-EN 12274-7:2005 consists of the English text of the European standard EN 12274-7:2005.

This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.

Date of Availability of the European standard is 25.05.2005.

The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 93.080.20

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:
Aru 10, 10317 Tallinn, Eesti; www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:
Aru 10, 10317 Tallinn, Estonia; www.evs.ee; phone 605 5050; e-mail info@evs.ee

English version

Slurry surfacing - Part 7: Shaking abrasion test

Matériaux bitumineux coulés à froid - Partie 7 : Essai
d'abrasion par agitation

Dünne Asphaltsschichten in Kaltbauweise - Teil 7: Schüttel-
Abriebprüfung

This European Standard was approved by CEN on 17 April 2005.

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.

CEN members are the national standards bodies of 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.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

Page

Foreword	3
1 Scope	4
2 Normative references	4
3 Principle.....	4
4 Materials and equipment	4
5 Preparation for the test.....	8
5.1 Preparation of specimens	8
5.1.1 General	8
5.1.2 Grading curve for aggregates	8
5.1.3 Binder content of the mix	8
5.2 Production of the mix	9
5.3 Production of test specimens	10
6 Test procedure	10
6.1 Determination of water absorption	10
6.1.1 Water absorption test	10
6.1.2 Equations for water absorption test	11
6.2 Determination of abrasion.....	12
6.2.1 Abrasion test	12
6.2.2 Equation for abrasion test.....	13
7 Record of results.....	13
Annex A (informative) Test record and report expression of results	14
Bibliography	15

Foreword

This document (EN 12274-7:2005) 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 November 2005, and conflicting national standards shall be withdrawn at the latest by December 2005.

This document describes a test method for determining the suitability and compatibility of aggregates and emulsions for slurry surfacings.

This European Standard is one of a series of standards as listed below:

EN 12274-1, *Slurry surfacing – Test methods – Part 1: Sampling for binder extraction.*

EN 12274-2, *Slurry surfacing – Test methods – Part 2: Determination of residual binder content.*

EN 12274-3, *Slurry surfacing – Test methods – Part 3: Consistency.*

EN 12274-4, *Slurry surfacing – Test methods – Part 4: Determination of cohesion of the mix.*

EN 12274-5, *Slurry surfacing – Test methods – Part 5: Determination of wearing.*

EN 12274-6, *Slurry surfacing – Test methods – Part 6: Rate of application.*

EN 12274-7, *Slurry surfacing – Test methods – Part 7: Shaking abrasion test.*

prEN 12274-8, *Slurry surfacing – Test methods – Part 8: Visual assessment.*

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 specifies a test method for determining the suitability of aggregates and cationic emulsions for slurry surfacings and, where appropriate, the effect of individual additives.

This document applies to slurry surfacings.

NOTE 1 The procedure uses a standardized mix composition but the method may also be used to assess the effect of variations in the grading and binder content but this use is not part of the standard.

NOTE 2 Additives affecting the breaking behaviour may also be tested under standardised conditions. The test may also be used to study the effect of a particular type of bitumen or emulsifier.

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 12697-6:2003, *Bituminous mixtures — Test methods for hot mix asphalt — Part 6: Determination of bulk density of bituminous specimens*

3 Principle

The shaking abrasion test determines the water sensitivity of mixes for slurry surfacings consisting of 0/2 mm aggregate and cationic emulsion for slurry surfacing.

The test measures the loss of material from standard specimens when cylinders of compacted material are placed in water filled cylinders which are rotated end over end in a suitable device.

The test uses mixtures for slurry surfacing using the materials to be used for producing slurry surfacing but made to a standard grading and binder content prepared at room temperature.

Four 25 mm high cylindrical specimens each with a diameter of 30 mm and prepared using a standardized mix for slurry surfacing are tested in each set of tests. The specimens are statically compacted and then conditioned by storage in water in a vacuum prior to testing.

4 Materials and equipment

- 4.1 Plastic, glass or porcelain containers with capacities of approximately 0,5 l.
- 4.2 Stirring spatula (or metal fork).
- 4.3 Balance accurate to $\pm 0,1$ g.
- 4.4 Warm air dryer.
- 4.5 Compaction moulds with bedplates (at least 4 are required for each test) (see Figure 1).
- 4.6 Compaction plugs, one for each compaction mould (see Figure 2).
- 4.7 Funnel (see Figure 3).