

Nederlandse norm

NEN-EN 12274-5

(en)

Slurry surfacing - Test method - Part 5:
Determination of the minimum binder content
and wearing resistance

Vervangt NEN-EN 12274-5:2003;
NEN-EN 12274-5:2016 Ontw.

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Als Nederlandse norm is aanvaard:
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EUROPEAN STANDARD

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NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2018

ICS 93.080.20

Supersedes EN 12274-5:2003

English Version

Slurry surfacing - Test method - Part 5: Determination of the minimum binder content and wearing resistance

Matériaux bitumineux coulés à froid - Méthode d'essai
- Partie 5: Détermination de la teneur minimum en
liant et de la résistance à l'usure

Dünne Asphaltdeckschichten in Kaltbauweise -
Prüfverfahren - Teil 5: Bestimmung des
Mindestbindemittelgehaltes und des Verschleißes von
Bitumenschlämmen

This European Standard was approved by CEN on 13 November 2017.

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European foreword

This document (EN 12274-5:2018) 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of an identical text or by endorsement, at the latest by September 2018, and conflicting national standards shall be withdrawn at the latest by September 2018.

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 12274-5:2003.

Compared with EN 12274-5:2003, the following changes have been made:

- a) In 6.1 the humidity is reduced from 100 % to 60 %;
- b) In 6.2 the Abrasion machine is defined in terms of rotating speed and force applied.

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

- EN 12274-1, *Slurry surfacing — Test methods — Part 1: Sampling of slurry surfacing mixture*;
- EN 12274-2, *Slurry surfacing — Test methods — Part 2: Determination of residual binder content including preparation of samples*;
- 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 the minimum binder content and wearing resistance*;
- EN 12274-6, *Slurry surfacing — Test methods — Part 6: Rate of application*;
- EN 12274-7, *Slurry surfacing — Test methods — Part 7: Shaking abrasion test*;
- EN 12274-8, *Slurry surfacing — Test methods — Part 8: Visual assessment of defects*.

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EN 12274-5:2018 (E)

1 Scope

This European Standard specifies a test method for the design of slurry surfacing mixture based on the determination of the minimum binder content of the mixture and the resistance to wear under wet track abrasion conditions for the purpose to support the mixture design.

This test can be used for quality control purposes.

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 1097-5, *Tests for mechanical and physical properties of aggregates - Part 5: Determination of the water content by drying in a ventilated oven*

ISO 48, *Rubber, vulcanized or thermoplastic — Determination of hardness (hardness between 10 IRHD and 100 IRHD)*

3 Terms and definitions

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

3.1

set

end of the non-reversible process when the emulsion coalescence takes place

Note 1 to entry: The coalescence of an emulsion is the non-reversible phase starting from the beginning of the breaking of the emulsion to the total setting when the bitumen emulsion reverts to bitumen in presence of a mineral.

Note 2 to entry: After the set of a slurry surfacing, it is not possible to stir the mixture; free emulsion during washing with water cannot be observed and an absorbent paper is not stained when pressed slightly onto the surface of the slurry surfacing.

3.2

set time

time elapsed between placing a slurry surfacing and its setting

3.3

quick setting slurry surfacing

slurry with a set time less than or equal to 30 min

3.4

slow setting slurry surfacing

slurry with a set time more than 30 min

4 Principle

The samples are tested under water, after which the mass-loss by abrasion is measured.

The test consists of an abrasive action operated by means of a hard rubber cylinder which exerts a planetary side gear rubbing pressure, applied for 5 min, on the surface of a test sample of slurry previously prepared, cured in an oven, and moistened by immersion.

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