

Hydraulically bound mixtures - Specifications - Part 3: Fly ash bound mixtures

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 14227-3:2004 sisaldab Euroopa standardi EN 14227-3:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 26.10.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 14227-3:2004 consists of the English text of the European standard EN 14227-3:2004.</p> <p>This document is endorsed on 26.10.2004 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 specifies “fly ash bound mixtures” for roads, airfields and other trafficked areas and specifies the requirements for their constituents, composition and laboratory performance classification. In this European Standard, fly ash refers to siliceous or calcareous fly ash complying with prEN 14227-4. Where fly ash is part of cement or hydraulic road binder conforming to EN 197-1 or ENV 13282, then reference should be made to prEN 14227-1 and prEN 14227-5 respectively.</p>	<p>Scope:</p> <p>This European Standard specifies “fly ash bound mixtures” for roads, airfields and other trafficked areas and specifies the requirements for their constituents, composition and laboratory performance classification. In this European Standard, fly ash refers to siliceous or calcareous fly ash complying with prEN 14227-4. Where fly ash is part of cement or hydraulic road binder conforming to EN 197-1 or ENV 13282, then reference should be made to prEN 14227-1 and prEN 14227-5 respectively.</p>
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Võtmesõnad: flame propagatio, laboratory tes, mineral aggregates, mixtures, particulate materials, pavements, pavements (roads), road construction, roads, rocks, size ranges, specification (approval), specifications, testing, testing conditions, unbound, water, water content

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English version

Hydraulically bound mixtures - Specifications - Part 3: Fly ash bound mixtures

Mélanges traités aux liants hydrauliques - Spécifications -
Partie 3 : Mélanges traités à la cendre volante

Hydraulisch gebundene Gemische - Anforderungen - Teil 3:
Flugaschegebundene Gemische

This European Standard was approved by CEN on 16 April 2004.

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Contents

	page
Foreword.....	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	6
4 Symbols and abbreviations	6
5 Constituents	7
5.1 Fly ash.....	7
5.2 Lime.....	7
5.3 Cement.....	7
5.4 Aggregates	7
5.5 Gypsum.....	7
5.6 Granulated blast furnace slag	7
5.7 Other constituents	7
5.8 Water	8
6 Fly ash bound mixtures	8
6.1 General.....	8
6.1.1 Types.....	8
6.1.2 Water content.....	8
6.1.3 Proportioning of the constituents, grading and dry density.....	8
6.1.4 Laboratory mechanical performance.....	8
6.2 Fly ash bound mixture 1	8
6.3 Fly ash bound mixture 2	9
6.3.1 Description	9
6.3.2 Grading of the mixture	9
6.3.3 Compacity.....	9
6.3.4 Immediate bearing index of the mixture.....	9
6.4 Fly ash bound mixture 3	9
6.4.1 Description	9
6.4.2 Grading of the mixture	9
6.4.3 Immediate bearing index of the mixture.....	10
6.5 Fly ash bound mixture 4	10
6.6 Fly ash bound mixture 5	10
6.6.1 Description	10
6.6.2 Fly ash.....	10
6.6.3 Lime activated mixtures.....	10
6.7 Examples of fly ash bound mixtures	10
7 Laboratory mechanical performance classification.....	11
7.1 General.....	11
7.2 Classification by compressive strength.....	11
7.3 Classification by R_t , E	12
7.3.1 General.....	12
7.3.2 Method by direct tensile testing.....	12
7.3.3 Method by indirect tensile testing.....	12
7.3.4 Method by indirect tensile and compression testing.....	12
8 Other characteristics	13

9	Workability period	13
10	Production control	13
11	Designation and description	13
11.1	Designation	13
11.2	Description	13
12	Marking and labelling	14
Annex A	(normative) Compacity of a fly ash bound mixture 2	23
Annex B	(informative) Examples of fly ash bound mixtures using siliceous fly ash	24
Annex C	(informative) Examples of fly ash bound mixtures using calcareous fly ash	25
Annex D	(informative) Production control for hydraulically treated mixtures	26
D.1	General	26
D.2	Quality manual	26
D.3	Organization	26
D.3.1	Responsibility and authority	26
D.3.2	Management representative	26
D.3.3	Internal audits	26
D.3.4	Management review	27
D.3.5	Sub-contract services	27
D.3.6	Records	27
D.3.7	Training	27
D.4	Control procedures	27
D.4.1	Production management	27
D.4.2	Composition of the mixture	28
D.4.3	Constituents	28
D.4.4	Process control	28
D.4.5	Inspection, calibration and control of process equipment	28
D.4.6	Handling and delivery	29
D.5	Inspection and testing of constituents and mixtures during production	29
D.5.1	General	29
D.5.2	Characteristics that require control during production	29
D.5.3	Frequency of sampling the mixture	30
D.6	Inspection and testing equipment	30
D.6.1	General	30
D.6.2	Measuring and testing equipment	30
D.6.3	Measuring and testing equipment in the process	30
D.6.4	Measuring and testing equipment in laboratory	30
D.7	Non-conformity	31
D.7.1	General	31
D.7.2	Non-conformity of constituents	31
D.7.3	Non-conformity of the mixture	31
Bibliography	32

Foreword

This document (EN 14227-3:2004) 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 January 2005, and conflicting national standards shall be withdrawn at the latest by January 2005.

This document is one of a series of standards for hydraulically bound mixtures.

prEN 14227-1, *Unbound and hydraulically bound mixtures — Specifications — Part 1: Cement bound granular mixtures*

EN 14227-2, *Hydraulically bound mixtures — Specifications — Part 2: Slag bound mixtures*

EN 14227-3, *Hydraulically bound mixtures — Specifications — Part 3: Fly ash bound mixtures*

EN 14227-4, *Hydraulically bound mixtures — Specifications — Part 4: Fly ash for hydraulically bound mixtures*

EN 14227-5, *Hydraulically bound mixtures — Specifications — Part 5: Hydraulic road binder bound mixtures*

prEN 14227-10, *Hydraulically bound mixtures — Specifications — Part 10: Soil treated by cement*

prEN 14227-11, *Unbound and hydraulically bound mixtures — Specifications — Part 11: Soil treated by lime*

prEN 14227-12, *Unbound and hydraulically bound mixtures — Specifications — Part 12: Soil treated by slag*

prEN 14227-13, *Unbound and hydraulically bound mixtures — Specifications — Part 13: Soil treated by hydraulic road binder*

prEN 14227-14, *Unbound and hydraulically bound mixtures — Specifications — Part 14: Soil treated by fly ash*

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 “fly ash bound mixtures” for roads, airfields and other trafficked areas and specifies the requirements for their constituents, composition and laboratory performance classification. In this document, fly ash refers to siliceous or calcareous fly ash complying with EN 14227-4. Where fly ash is part of cement or hydraulic road binder conforming to EN 197-1 or ENV 13282, then reference should be made to prEN 14227-1 and EN 14227-5 respectively.

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

EN 933-1, *Tests for geometrical properties of aggregates — Part 1: Determination of particle size distribution — Sieving method*

EN 1097-6, *Tests for mechanical and physical properties of aggregates – Part 6: Determination of particle density and water absorption*

EN 1097-7, *Tests for mechanical and physical properties of aggregates – Part 7: Determination of the particle density of filler – Pycnometer method*

EN 13242, *Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction*

EN 13286-1, *Unbound and hydraulically bound mixtures — Part 1: Test methods for laboratory reference density and water content — Introduction, general requirements and sampling*

EN 13286-2, *Unbound and hydraulically bound mixtures — Part 2: Test methods for the determination of the laboratory reference density and water content — Proctor compaction*

EN 13286-3, *Unbound and hydraulically bound mixtures — Part 3: Test methods for laboratory reference density and water content — Vibrocompression with controlled parameters*

EN 13286-4, *Unbound and hydraulically bound mixtures — Part 4: Test methods for laboratory reference density and water content — Vibrating hammer*

EN 13286-5, *Unbound and hydraulically bound mixtures — Part 5: Test methods for laboratory reference density and water content — Vibrating table*

EN 13286-40, *Unbound and hydraulically bound mixtures — Part 40: Test method for the determination of the direct tensile strength of hydraulically bound mixtures*

EN 13286-41, *Unbound and hydraulically bound mixtures — Part 41: Test method for the determination of the compressive strength of hydraulically bound mixtures*

EN 13286-42, *Unbound and hydraulically bound mixtures — Part 42: Test method for the determination of the indirect tensile strength of hydraulically bound mixtures*

EN 13286-43, *Unbound and hydraulically bound mixtures — Part 43: Test method for the determination of the modulus of elasticity of hydraulically bound mixtures*

EN 13286-45, *Unbound and hydraulically bound mixtures — Part 45: Test method for the determination of the workability period of hydraulically bound mixtures*

EN 13286-47, *Unbound and hydraulically bound mixtures — Part 47: Test methods for the determination of California bearing ratio, immediate bearing index and linear swelling*

prEN 13286-50, *Unbound and hydraulically bound mixtures — Part 50: Method for the manufacture of test specimens of hydraulically bound mixtures using Proctor equipment or vibrating table compaction*

prEN 13286-51, *Unbound and hydraulically bound mixtures — Part 51: Method for the manufacture of test specimens of hydraulically bound mixtures by vibrating hammer compaction*

prEN 13286-52, *Unbound and hydraulically bound mixtures — Part 52: Method for the manufacture of test specimens of hydraulically bound mixtures by vibrocompression*

prEN 13286-53, *Unbound and hydraulically bound mixtures Methods for the manufacture of test specimens of hydraulically bound mixtures by axial compression*

EN 14227-2, *Hydraulically bound mixtures — Specifications — Part 2: Slag bound mixtures*

EN 14227-4, *Hydraulically bound mixtures — Specifications — Part 4: Fly ash for hydraulically bound mixtures*

prEN 14227-11, *Unbound and hydraulically bound mixtures — Specifications — Part 11: Soil treated by lime*

3 Terms and definitions

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

3.1

hydraulically bound mixture

mixture which sets and hardens by hydraulic reaction

3.2

fly ash bound mixture

hydraulically bound mixture in which siliceous or calcareous fly ash is the essential constituent of the binder

NOTE Hardening may be controlled by additional constituents.

3.3

slenderness ratio

height to diameter ratio of the specimen

3.4

compacity

ratio of the absolute volume of the solid to the apparent volume of the mixture (see annex A)

4 Symbols and abbreviations

For the purpose of this document, the following symbols and abbreviations apply.

R_c is the compressive strength, expressed in megapascals (MPa);

R_t is the direct tensile strength, expressed in megapascals (MPa);