Tasandusmördid ja põrandate tasanduskiht. Tasandusmördid. Omadused ja nõuded

Screed material and floor screeds - Screed material nts
Occurrence of the second o Properties and requirements



# **EESTI STANDARDI EESSÕNA**

# **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 13813:2005 sisaldab Euroopa standardi EN 13813:2002 ingliskeelset teksti.

This Estonian standard EVS-EN 13813:2005 consists of the English text of the European standard EN 13813:2002.

Standard on kinnitatud Eesti Standardikeskuse 18.02.2003 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

This standard is ratified with the order of Estonian Centre for Standardisation dated 18.02.2003 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 16.10.2002.

Date of Availability of the European standard text 16.10.2002.

Standard on kättesaadav Eesti standardiorganisatsioonist.

The standard is available from Estonian standardisation organisation.

ICS 91.100.10

Võtmesõnad: nõuded, Tasanduskiht, Tasandusmört, vastavushindamine

#### Standardite reprodutseerimis- ja levitamisõigus kuulub Eesti Standardikeskusele

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

# EUROPEAN STANDARD NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

EN 13813

October 2002

ICS 91,100,10

#### **English version**

# Screed material and floor screeds - Screed material - Properties and requirements

Matériaux de chapes et chapes - Matériaux de chapes - Propriétés et exigences Estrichmörtel, Estrichmassen und Estriche - Estrichmörtel und Estrichmassen - Eigenschaften und Anforderungen

This European Standard was approved by CEN on 14 September 2002.

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 Management Centre 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, 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

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# **Foreword**

This document EN 13813:2002 has been prepared by Technical Committee CEN/TC 303 "Floor screeds and in-situ floorings in buildings", 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 April 2003, and conflicting national standards shall be withdrawn at the latest by July 2004.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative annex ZA, which is an integral part of this document.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, A DECLIEN ORDER DE DE LES France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

# Introduction

The properties required of a screed are related to its use.

They are considered in two groups: those relating to the fresh, unhardened screed material and those relating to the hardened screed material.

The properties achieved depend essentially on the type or types of binder used and their respective proportions. The type of aggregates, admixtures and/or additions used can achieve special properties.

# 1 Scope

This European Standard specifies requirements for screed material for use in floor construction internally.

To support the aim of achieving a performance related standard, as far as practicable this standard refers only to the properties of the product and not to its method of manufacture, except when this is unavoidable in the description of the characteristics of the product.

It defines for fresh screed material the performance related to setting time, consistency, pH value and for the hardened screed material, compressive strength, flexural strength, wear resistance, surface hardness, resistance to indentation, resistance to rolling wheel, shrinkage and swelling, modulus of elasticity, bond strength, impact resistance, reaction to fire, acoustic performance, thermal resistance and chemical resistance.

It provides for the evaluation of conformity of the product to this European Standard.

The marking requirements for products covered by this European Standard are included.

This standard covers screed materials as defined in EN 13318.

Structural screeds, i.e. those that contribute to the load bearing capacity of the structure, are excluded from this standard.

NOTE This standard can be used in conjunction with codes of application and national specifications for site made screed material produced and laid by the same contractor.

#### 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 1062-3, Paints and varnishes - Coating materials and coating systems for exterior masonry and concrete - Part 3: Determination and classification of liquid-water transmission rate (permeability).

EN 1081, Resilient floor coverings – Determination of the electrical resistance.

prEN 1504-2, Products and systems for the protection and repair of concrete structures – Definitions, requirements, quality control and evaluation of conformity – Part 2: Surface protection systems.

### EN 13813:2002 (E)

EN 12086, Thermal insulating products for building applications - Determination of water vapour transmission properties.

prEN 12354-6, Building acoustics - Estimation of acoustic performance of buildings from the performance of elements - Part 6: Sound absorption in enclosed spaces.

EN 12524, Building materials and products - Hygrothermal properties - Tabulated design values.

EN 12664, Thermal performance of building materials and products - Determination of thermal resistance by means of guarded hot plate and heat flow meter methods - Dry and moist products of medium and low thermal resistance.

prEN 12697-20, Bituminous mixtures - Test methods for hot mix asphalt - Part 20: Indentation using cube or marshall specimens.

prEN 12697-21, Bituminous mixtures - Test methods for hot mix asphalt - Part 21: Indentation using plate specimens.

EN 12706, Adhesives - Test methods for hydraulic setting floor smoothing and/or levelling compounds - Determination of flow characteristics.

EN 13318, Screed materials and floor screeds – Definitions.

prEN 13454-2, Binders, composite binders and factory made mixtures for floor screeds based on calcium sulfate - Part 2: Test methods.

EN 13501-1, Fire classification of construction products and building elements – Part 1: Classification using test data from reaction to fire tests.

prEN 13529, Products and systems for the protection and repair of concrete structures - Test method - Resistance to high chemical attack.

prEN 13872, Methods of test for hydraulic setting floor smoothing and/or levelling compounds - Determination of dimensional change.

prEN 13892-1, Methods of test for screed materials - Part 1: Sampling, making and curing specimens for test.

prEN 13892-2, Methods of test for screed materials - Part 2: Determination of flexural and compressive strength.

prEN 13892-3, Methods of test for screed materials - Part 3: Determination of wear resistance-Böhme.

prEN 13892-4, Method of test for screed materials – Part 4: Determination of wear resistance-BCA.

prEN 13892-5, Methods of test for screed materials - Part 5: Determination of wear resistance to rolling wheel - Methods for screed material for wearing layer.

prEN 13892-6, Methods of test for screed materials - Part 6: Determination of surface hardness.

prEN 13892-7, Methods of test for screed materials - Part 7: Determination of resistance to rolling wheel - Methods for screed material with floor coverings.

prEN 13892-8, Methods of test for screed materials - Part 8: Determination of bond strength.

EN ISO 140-6, Acoustics - Measurement of sound insulation in buildings and of building elements - Part 6: Laboratory measurements of impact sound insulation of floors (ISO 140-6:1998).

EN ISO 178, Plastics - Determination of flexural properties (ISO 178:1993).

EN ISO 354, Acoustics - Measurement of sound absorption in a reverberation room (ISO 354:1985).

EN ISO 354/A1, Acoustics - Measurement of sound absorption in a reverberation room - Amendment 1: Test specimen mountings for sound absorption tests (ISO 354:1985/AMD1:1997).

EN ISO 6272, Paints and varnishes - Falling-weight test (ISO 6272:1993).

# 3 Terms and definitions, symbols and abbreviations

### 3.1 Terms and definitions

For the purpose of this European Standard, the terms and definitions described in EN 13318 apply.

### 3.2 Symbols and abbreviations

The following abbreviations are used in this European Standard for screeds in relation to the binder used:

CT cementitious screeds

CA calcium sulfate screeds

MA magnesite screeds

AS mastic asphalt screeds

SR synthetic resin screeds

The following abbreviations are used in this standard for designation of the properties:

C for compressive strength F for flexural strength

A for wear resistance "Böhme" RWA for wear resistance to rolling wheel

AR for wear resistance "BCA" SH for surface hardness

IC for resistance to indentation on cubes IP for resistance to indentation on plates

RWFC for resistance to rolling wheel with floor covering

E for modulus of elasticity
B for bond strength
IR for impact resistance

#### 4 Materials

Binders, aggregates, admixtures, additives and water with established suitability for screed material shall be used.

# 5 Classification and requirements

#### 5.1 General

The requirements and properties specified in this standard shall be defined in terms of the test methods and procedures referred to in this standard. For these tests the screed material shall be sampled and the test specimens made and cured in accordance with prEN 13892-1.

Where flooring systems are used to protect or reinstate the integrity of a concrete structure, the requirements according to prEN 1504-2 shall also be fulfilled in addition to the requirements of this standard.

The conformity criteria given in the following subclauses relate to initial type tests and production control. The production control system shall be detailed in the Quality Manual.