

## **Methods of test for screed materials - Part 2: Determination of flexural and compressive strength**

Methods of test for screed materials - Part 2:  
Determination of flexural and compressive strength

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

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| <p>Käesolev Eesti standard EVS-EN 13892-2:2002 sisaldab Euroopa standardi EN 13892-2:2002 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 13.12.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p> | <p>This Estonian standard EVS-EN 13892-2:2002 consists of the English text of the European standard EN 13892-2:2002.</p> <p>This document is endorsed on 13.12.2002 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><b>Käsitlusala:</b><br/>This European Standard specifies a method for determining the flexural and compressive strength of moulded mortar specimens made from cementitious-, calcium sulfate screed-, magnesite screed- and synthetic resin screed material. These methods are also suitable for specimens cut from floor screed</p> | <p><b>Scope:</b><br/>This European Standard specifies a method for determining the flexural and compressive strength of moulded mortar specimens made from cementitious-, calcium sulfate screed-, magnesite screed- and synthetic resin screed material. These methods are also suitable for specimens cut from floor screed</p> |
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**Võtmesõnad:** asphalts, floor beds, floor coverings, floors, fresh mortar, inspection, magnesia floor screeds, mastic asphalts, material, mortars, properties, ready-made mortars, screeds (floors), specification (approval), specifications, strength of materials, testing

ICS 91.100.10

English version

## Methods of test for screed materials - Part 2: Determination of flexural and compressive strength

Méthodes d'essai des matériaux pour chapes - Partie 2:  
Détermination de la résistance à la flexion et à la  
compression

Prüfverfahren für Estrichmörtel und Estrichmassen - Teil 2:  
Bestimmung der Biegezug- und Druckfestigkeit

This European Standard was approved by CEN on 9 October 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.

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## Foreword

This document (EN 13892-2:2002) 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.

It was prepared by Working Group 2 "Screed materials and floor screeds-Test-methods" taking into account the proposals submitted by Working Group 1 "Screed materials and floor screeds-Definitions, properties and requirements".

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 2003, and conflicting national standards shall be withdrawn at the latest by May 2003.

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, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

## 1 Scope

This European Standard specifies a method for determining the flexural and compressive strength of moulded specimens made from cementitious screed-, calcium sulphate screed-, magnesite screed- and synthetic resin screed material.

## 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 196-1, *Methods of testing cement - Part 1: Determination of strength.*

EN 13813, *Screed material and floor screeds - Screed material - Properties and requirements.*

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

EN ISO 6507-1, *Metallic materials - Vickers hardness test - Part 1: Test method (ISO 6507-1:1997).*

## 3 Principle

The flexural and compressive strengths are measured on specimens made in accordance with EN 13892-1. The flexural test is carried out first. The flexural strength is determined from the load required to cause failure of the test specimen under midspan bending.

The two halves of the broken test specimen are then used in the compression test. Each is tested using a uniformly distributed compressive load applied over a portion of the broken prism. The compressive strength is determined from the load required to cause failure.

## 4 Symbols and abbreviations

$F_f$  is the load in Newtons (N) required to cause failure in the flexural test.

$F_c$  is the load in Newtons (N) required to cause failure in the compression test.

$l$  is the distance in millimeters (mm) between the axes of the support rollers in the flexural test.

$b$  is the width of the test specimen in millimeters (mm) under the central roller in the flexural test in the “as tested” mode;  $b$  is the depth in the “as cast” mode.

$d$  is the depth of the test specimen in millimeters (mm) under the central roller in the flexural test in the “as tested” mode;  $d$  is the width in the “as cast” mode.

$A$  is the area of the compressive strength specimen in contact with the bearing plates (nominally 1600 mm<sup>2</sup>)

$R_f$  is the flexural strength in N/mm<sup>2</sup> as determined from the test parameters.