# **Surfaces for sports areas - Determination of slip resistance**

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## **EESTI STANDARDI EESSÕNA**

### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN
14837:2006 sisaldab Euroopa standardi
EN 14837:2006 ingliskeelset teksti.

Käesolev dokument on jõustatud 29.06.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 14837:2006 consists of the English text of the European standard EN 14837:2006.

This document is endorsed on 29.06.2006 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

#### Käsitlusala:

This European Standard specifies a method for the determination of the slip resistance of a sports surface in relation to a studded or smooth soled sports shoe.

#### Scope:

This European Standard specifies a method for the determination of the slip resistance of a sports surface in relation to a studded or smooth soled sports shoe.

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Võtmesõnad:

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#### **English Version**

# Surfaces for sports areas - Determination of slip resistance

Sols sportifs - Détermination de la glissance

Sportböden - Bestimmung der Rutschfestigkeit

This European Standard was approved by CEN on 13 April 2006.

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.

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

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# **Foreword**

This document (EN 14837:2006) has been prepared by CEN/TC 217, "Surfaces for sports areas", the secretariat of which is held by BSI.

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 2006, and conflicting national standards shall be withdrawn at the latest by November 2006.

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, or is a provious of the state o Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

#### 1 Scope

This European Standard specifies a method for the determination of the slip resistance of a sports surface in relation to a studded or smooth soled sports shoe.

#### 2 Normative reference

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.

ISO 4662, Rubber – Determination of rebound resilience of vulcanizates.

#### 3 Terms and definitions

For the purposes of this document, the following term and definition applies.

#### 3.1

#### slip resistance

calculated value from the reduction of the height of rise of a pendulum as a result of the friction between the profile and sports surface using correction factors

#### 4 Principle

A free falling weight covered with a rubber or plastic shoe profile (studded or smooth) rotates around a horizontal axis (pendulum). During its circular course, the profile is dragged over the sports surface and is slowed down by the friction between the shoe profile and the test surface.

### 5 Apparatus

#### 5.1 Slip resistance tester (see Figure 1), comprising:

- pendulum, having a length (axis to shoe profile) of 340 mm ± 3 mm;
- falling weight, having a mass of 1 600 g ± 50 g (including pendulum arm, metal profile holder and shoe profile);
- profile holder, with a sharp pointer to adjust the pressure on the profile;
- spring, having a K-value of 0,8 N/mm ± 0,05 N/mm, to adjust the pressure of the shoe profile on the test piece;
- frame equipped with a device to hold the pendulum horizontal prior to the start of the test and to release the pendulum at the start of the test;
- scale, with a pointer that records the maximum value achieved.

On the lower part of the frame there shall be three grooves, A1 and A2 for use when adjusting the pendulum and B (see Figure 2), at which the pendulum stops when calibrated using the calibration surface. There shall be a further groove, C (see Figure 3), on the lower part of the pendulum.