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Surfaces for sports areas - Multi-sports floor systems for indoor use - Test method for determination of rotational friction

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 14903:2018 sisaldab Euroopa standardi EN 14903:2018 ingliskeelset teksti.	This Estonian standard EVS-EN 14903:2018 consists of the English text of the European standard EN 14903:2018.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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English Version

Surfaces for sports areas - Multi-sports floor systems for indoor use - Test method for determination of rotational friction

Sols sportifs - Systèmes de sols multisports pour utilisation en intérieur - Méthode d'essai de détermination de la glissance en rotation

Sportböden - Synthetische Sportböden für den Innenbereich - Bestimmung der Drehreibung

This European Standard was approved by CEN on 1 October 2017.

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European foreword

This document (EN 14903:2018) has been prepared by Technical Committee CEN/TC 217 “Surfaces for sports areas”, the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by December 2018, and conflicting national standards shall be withdrawn at the latest by December 2018.

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1 Scope

This European Standard specifies a method for the determination of the friction between multi-sports floor systems excluding synthetic turf for indoor use and a rotating foot with a vertical load. The method is applicable to tests carried out in the laboratory and on site.

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 660-1, *Resilient floor coverings — Determination of wear resistance — Part 1: Stuttgart test*

EN 60051 (all parts), *Direct acting indicating analogue electrical measuring instruments and their accessories (IEC 60051)*

EN ISO 291, *Plastics - Standard atmospheres for conditioning and testing (ISO 291)*

ISO 21948, *Coated abrasives — Plain sheets*

3 Terms and definitions

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

3.1

friction coefficient

horizontal force between the test foot and the sports surface (resulting from the measured torque) divided by the vertical load on the foot during rotation

Note 1 to entry: See 4.6 to determine the coefficient of friction.

3.2

vertical load

vertical force exerted on the sports floor by the test foot

3.3

torque

result of forces occurring at the eccentrically positioned test soles when the test foot rotates onto the sports surface under vertical load

Note 1 to entry: The torque equals the force multiplied by the distance of the skids from the centre of the test foot.

4 Determination of rotational friction

4.1 General principle

Friction is measured by allowing a circular test foot, with attached test soles, to rotate on the sports surface under a vertical load. The friction resistance is calculated by recording the torque when the rotating test foot touches the test surface and then slides in rotation until the foot comes to a complete stop. From this, the coefficient of friction, μ , is calculated.