Surfaces for sports areas - Determination of the behaviour under a rolling load



# EESTI STANDARDI EESSÕNA

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# EUROPEAN STANDARD NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

**EN 1569** 

May 2020

ICS 97.220.10

Supersedes EN 1569:1999

#### **English Version**

# Surfaces for sports areas - Determination of the behaviour under a rolling load

Sols sportifs - Détermination du comportement sous charge roulante

Sportböden - Bestimmung des Verhaltens bei rollender

This European Standard was approved by CEN on 2 March 2020.

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 CEN-CENELEC 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 CEN-CENELEC Management Centre 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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# **European foreword**

This document (EN 1569:2020) 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of an identical text or by endorsement, at the latest by November 2020, and conflicting national standards shall be withdrawn at the latest by November 2020.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 1569:1999.

The main change compared to the previous edition is an enhanced equipment description to improve the reproducibility of the test, including:

- guide tracks to ensure the test wheel always passes over the same area,
- use of a metronome or similar to set the pace of movement or mechanical means such as an automated drive system.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

# 1 Scope

This document specifies a method of test for the determination of behaviour under a rolling load of certain surfaces for sports areas. It is suitable for tests undertaken in the laboratory and on site.

#### 2 Normative references

There are no normative references in this document.

#### 3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <a href="http://www.electropedia.org/">http://www.electropedia.org/</a>
- ISO Online browsing platform: available at <a href="https://www.iso.org/obp/ui">https://www.iso.org/obp/ui</a>

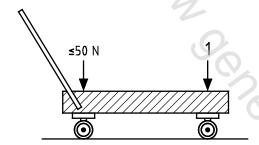
## 4 Principle

The behaviour under a rolling-load is determined by stressing the critical area, e.g. joints, welded joints, etc. of an indoor sports surface by the repeated traversing of a loaded wheel and observing any resulting damage.

## 5 Apparatus

**5.1** Loaded wheel apparatus.

NOTE The apparatus is shown schematically in Figure 1.



#### Key

1 load

Figure 1 — Schematic illustration of the loaded wheel apparatus

- **5.2** A steel test wheel, of diameter  $(100 \pm 1)$  mm and width  $(30,0 \pm 0,3)$  mm with the edges rounded to a radius of  $(1 \pm 0,1)$  mm.
- **5.3** A rigid plate, for example of steel or timber, of minimum thickness 50 mm, with two supporting wheels, in addition to the test wheel.
- **5.4** A means of moving the apparatus backwards and forwards over the test specimen at a velocity of approximately 1 m/s. This may be achieved by manual movement using a metronome or similar to set the pace of movement or by mechanical means such as an automated drive system.