



SLOVENSKI STANDARD
oSIST prEN 17324:2019
01-januar-2019

Podloge za športne dejavnosti - Preskusna metoda za ugotavljanje odpornosti proti dinamični utrujenosti oblog za blaženje udarcev in športnih podlog

Surfaces for sports areas - Test method for the determination of the resistance to dynamic fatigue of shock pads and sports surfaces

Sportböden - Prüfverfahren zur Bestimmung der Widerstandsfähigkeit gegen dynamische Ermüdung von elastifizierenden Schichten und Sportflächen

Sols sportifs - Méthode d'essai visant à déterminer la résistance à la fatigue dynamique des couches de souplesse et des sols sportifs

Ta slovenski standard je istoveten z: prEN 17324

ICS:

97.220.10 Športni objekti Sports facilities

oSIST prEN 17324:2019 **en,fr,de**

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
prEN 17324

November 2018

ICS 97.220.10

English Version

Surfaces for sports areas - Test method for the determination of the resistance to dynamic fatigue of shock pads and sports surfaces

Sols sportifs - Méthode d'essai visant à déterminer la
résistance à la fatigue dynamique des couches de
souplesse et des sols sportifs

Sportböden - Prüfverfahren zur Bestimmung der
Widerstandsfähigkeit gegen dynamische Ermüdung
von elastifizierenden Schichten und Sportflächen

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 217.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents		Page
European foreword		3
1	Scope.....	4
2	Normative references.....	4
3	Terms and definitions.....	4
4	Principle.....	4
5	Apparatus	4
6	Test specimens	5
7	Conditioning and test temperature.....	5
8	Procedure	5
9	Expression of results	6
10	Test report.....	6

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 17324:2020

<https://standards.iteh.ai/catalog/standards/sist/1617d704-c2cb-426d-ab87-3c2859b03fe3/sist-en-17324-2020>

European foreword

This document (prEN 17324:2018) has been prepared by Technical Committee CEN/TC 217 “Surfaces for sports areas”, the secretariat of which is held by AFNOR.

This document is currently submitted to the CEN Enquiry.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 17324:2020

<https://standards.iteh.ai/catalog/standards/sist/1617d704-c2cb-426d-ab87-3c2859b03fe3/sist-en-17324-2020>

prEN 17324:2018 (E)**1 Scope**

This document specifies a method of test for the determination of resistance to dynamic fatigue of shock pads (including elastic layers) used in synthetic turf surfacing systems. It can also be used on other types on complete forms of sports surfacing systems.

The test is undertaken on test specimens in the laboratory.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

EN 1969, *Surfaces for sports areas - Determination of thickness of synthetic sports surfaces*

EN ISO 9863-1, *Geosynthetics - Determination of thickness at specified pressures - Part 1: Single layers (ISO 9863-1)*

EN ISO 3385, *Flexible cellular polymeric materials - Determination of fatigue by constant-load pounding (ISO 3385:)*

CEN/TS 16717, *Surface for sports areas - Method of test for the determination of shock absorption, vertical deformation and energy restitution using the advanced artificial athlete*

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 <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

4 Principle

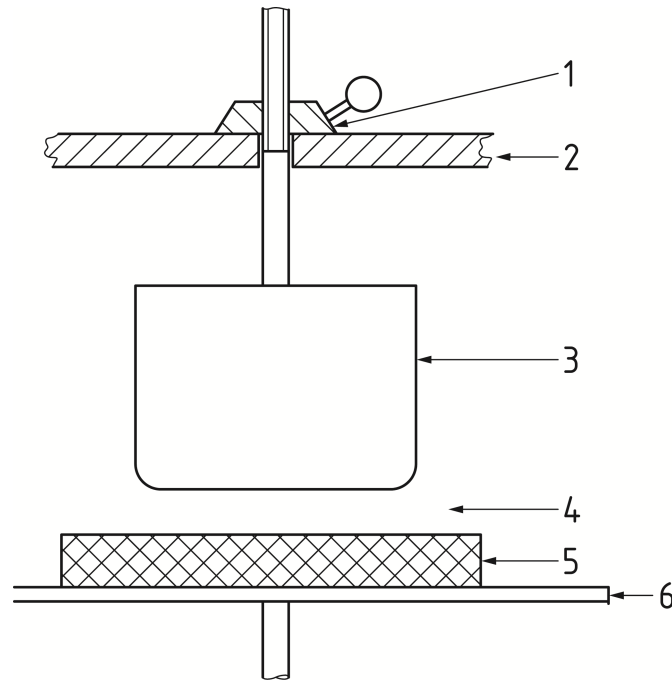
The shock pad or elastic layer is subjected to repeated impacts and any changes in the performance of structure of the shock pad or elastic layer is measured.

5 Apparatus

Dynamic fatigue repeated impact as described in EN ISO 3385, but modified as follows:

- Indenter diameter: 100 mm ± 5 mm
- Indenter radius: 8 mm ± 2 mm
- Maximum impact load: 750N ± 50N
- Impact frequency: 10 cycles/min ± 1 cycles/min
- Duration of test: 10,000 cycles ± 100 cycles

The principles of the test are illustrated in Figure 1.

**Key**

- 1 adjustable stop
- 2 indenter support mounting
- 3 indenter
- 4 indenter radius
- 5 test piece
- 6 platen

Figure 1 — Schematic view of test apparatus

6 Test specimens

A sample measuring at least 375 mm x 375 mm.

7 Conditioning and test temperature

Condition the test specimen at a temperature of $(23 \pm 2) ^\circ\text{C}$ prior to starting the test. Undertake the test at a temperature of $(23 \pm 2) ^\circ\text{C}$.

8 Procedure

8.1 Condition the test specimen, ensuring it remains in a flat condition, for a minimum of 3 h.

8.2 Determine the shock absorption of the test specimen in accordance with CEN/TS 16717, on a rigid concrete test floor.

8.3 Determine the thickness of the test specimen.

For bound rubber crumb shock pads (in situ rubber shock pads and E-layers) the thickness shall be measured in accordance with EN 1969.