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Surfaces for sports areas - Test method for the determination of tensile properties of synthetic sports surfaces



EESTI STANDARDI EESSÕNA

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EUROPEAN STANDARD

EN 12230

NORME EUROPÉENNE

EUROPÄISCHE NORM

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Supersedes EN 12230:2003

English Version

Surfaces for sports areas - Test method for the determination of tensile properties of synthetic sports surfaces

Sols sportifs - Méthode d'essai pour la détermination des caractéristiques de traction des surfaces sportives synthétiques

Sportböden - Prüfverfahren für die Bestimmung der Zugfestigkeitseigenschaften von Kunststoffflächen

This European Standard was approved by CEN on 16 October 2022.

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

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Contents

Page

European foreword.....	3
1 Scope.....	4
2 Normative references.....	4
3 Terms and definitions.....	4
4 Method 1 - Determination of the tensile properties of homogenous test specimens less than 25 mm thick.....	5
4.1 Principle.....	5
4.2 Apparatus.....	5
4.3 Test specimens.....	5
4.4 Preparation and conditioning.....	6
4.5 Number of test specimens.....	7
4.6 Procedure.....	7
4.7 Calculation and expression of results.....	7
4.8 Test report.....	8
5 Method 2 - Determination of the transverse tensile properties of homogenous shockpads 25 mm or greater in thickness.....	9
5.1 Principle.....	9
5.2 Apparatus.....	9
5.3 Tests specimens.....	9
5.4 Preparation and conditioning.....	11
5.5 Number of test specimens.....	11
5.6 Procedure.....	11
5.7 Calculation and expression of results.....	11
5.8 Test report.....	12
6 Method 3 - Determination of the tensile properties of prefabricated shockpads containing slots or grooves.....	12
6.1 Principle.....	12
6.2 Apparatus.....	12
6.3 Test specimens.....	12
6.4 Preparation and conditioning.....	14
6.5 Number of test specimens.....	14
6.6 Procedure.....	14
6.7 Calculation and expression of results.....	15
6.8 Test report.....	15

European foreword

This document (EN 12230:2023) 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 July 2023, and conflicting national standards shall be withdrawn at the latest by July 2023.

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.

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Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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1 Scope

This document specifies three methods for the determination of the tensile properties of materials used as surfaces, elastic layers and shockpads for sports areas.

Method 1 measures the tensile strength of homogenous test specimens that are less than 25 mm in thickness.

Method 2 measures the transversal tensile strength of homogenous test specimens that are more than 25 mm in thickness.

Method 3 measures the tensile strength of sports surfaces or shockpads that are non-homogenous and contain slots or grooves cut into their structure.

This document is applicable both to prefabricated sheet materials and to materials formed by casting of liquid systems cured in-situ.

If the nature of the sports surface is such that a properly representative test piece cannot be prepared in the manner described in this document, then determination of tensile properties should not be attempted for quality control purposes, or as a predictor of performance in use. With such materials, it can be more appropriate to determine their compressive properties or other dynamic characteristics for these purposes.

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

3 Terms and definitions

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

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

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

3.1

peak-to-valley height

geometric measure of the roughness of the top of surfacing; the magnitude of regularly or irregularly recurring vertical deviations of a surface

3.2

point of failure

maximum force less 10%

3.3

rupture

peak load, less 10%