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Surfaces for sport areas - Synthetic turf and textile sports surfaces - Part 5: Specification for infill materials

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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Sportböden - Kunststoffrasenflächen und textile Sportflächen - Teil 5: Spezifikation für Verfüllgut

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Contents	Page
European foreword	4
Introduction	5
1 Scope	6
2 Normative references	6
3 Terms and definitions	7
4 Sampling and conditioning	8
5 Classification	8
6 Physical properties	9
6.1 General	9
6.2 Infill composition	9
6.3 Particle size distribution	10
6.4 Particle shape	10
6.5 Bulk density	10
6.6 Polymer characterization	10
6.7 Buoyancy	10
6.8 Water absorption	11
7 Performance and material requirements	11
7.1 Introduction	11
7.2 Elastic properties	11
7.3 Resistance to residual deformation after static load	11
7.4 Durability	11
7.4.1 Polymeric infills	11
7.4.2 Vegetal, mineral, coated mineral and blended infills	12
7.5 Surfaces temperature during exposure to infrared energy	12
7.6 Resistance to melting / permanent agglomeration	12
7.7 Inhalable dust content	13
7.8 Water infiltration	13
7.9 Resistance to artificial weathering of polymeric and coated mineral infills	13
7.9.1 General	13
7.9.2 Elastic properties	13
7.9.3 Durability	13
7.9.4 Colour fastness	14
7.9.5 Resistance to permanent agglomeration	14
7.10 Resistance to ageing of vegetal and blended infills	14
7.10.1 General	14
7.10.2 Elastic properties	14
7.10.3 Durability	14
7.11 Resistance to freeze-thaw cycles	14
8 Reaction to fire	15
9 Toxicology	15
9.1 Polycyclic organic hydrocarbons (PAH) content	15
9.2 Migration of chemical elements through accidental human digestion	15

9.3	Leaching of chemical elements through immersion in water	15
10	Production tolerances.....	16
10.1	Introduction	16
10.2	Particle size distribution	16
10.3	Particle shape.....	16
10.4	Bulk density.....	16
10.5	Polymer characterization.....	17
10.6	Infill colour.....	17
10.7	Blended infills.....	17
11	Assessment of reclaimed infills to determine suitability for reuse	17
11.1	General	17
11.2	Sampling	17
11.3	Testing and requirements.....	17
11.3.1	General	17
11.3.2	Infill composition.....	17
11.3.3	Particle size.....	17
11.3.4	Particle shape.....	17
11.3.5	Bulk density.....	17
11.3.6	Inhalable dust content.....	18
11.3.7	PAH content	18
11.3.8	Migration of chemical elements through accidental human digestion.....	18
11.3.9	Elastic properties of reclaimed polymeric infills.....	18
11.3.10	Durability of reclaimed performance infills	18
11.3.11	Resistance to permanent agglomeration	18
12	Test reports	18
	Annex A (normative) Particle size distribution – Presentation of results.....	19
	Annex B (normative) Test method for the characterization of polymeric infills and coating.....	21
	Annex C (normative) Test method for the buoyancy characteristics and the water absorption properties infill materials	23
	Annex D (normative) Method of test for the determination of the elastic properties of performance infill materials	27
	Annex E (normative) Method of test for the determination of infill durability	34
	Annex F (normative) Method of test of for the determination of temperature build-up of infill materials when exposed to infrared heat.....	39
	Annex G (normative) Method of test of for the determine the temperature required for permanent agglomeration	43
	Annex H (normative) Method of test of for the determination of infill material’s resistance to freeze–thaw cycles	47
	Annex I (normative) Method of test of for reaction to fire	49
	Annex J (informative) Guidance on the polycyclic aromatic hydrocarbons (PAH) content of infill materials.....	51
	Bibliography	52

EN 15330-5:2025 (E)**European foreword**

This document (EN 15330-5:2025) 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 March 2026, and conflicting national standards shall be withdrawn at the latest by March 2026.

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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Introduction

Sports performance characteristics

The sports performance characteristics of a synthetic turf or textile sports surface are provided by the combined characteristics of the synthetic turf or textile surface, any infill within the playing surface pile and any shockpad laid beneath the synthetic turf or textile sports surface. The selection of the correct permutations of each is complex and the responsibility of the sports surface designer. Guidance on the specific sports performance characteristics required by various sports is provided in EN 15330-1 and in the standards and sporting regulations issued by international sports governing bodies.

Minimizing infill migration into the environment

If infill materials migrate from a synthetic turf or textile sports surface into the surrounding natural environment, they can become a source of environmental contamination. To minimize the risk of this occurring, sports fields and courts having synthetic turf or textile sports surfaces containing infill materials should be designed to incorporate measures to prevent the infill migration. Guidance on appropriate infill containment is given in CEN Technical Report PD CEN/TR 17519.

EN 15330-5:2025 (E)**1 Scope**

This document:

- a) specifies minimum performance and durability requirements for performance infill materials used in synthetic turf, and textile sports surfaces;
- b) describes how the performance of an infill shall be measured, and the results classified;
- c) specifies the physical and chemical properties of an infill that are to be declared in a manufacturer's product declaration;
- d) specifies minimum production control tolerance to ensure consistency of infill materials between production batches;
- e) describes how reclaimed infill is to be tested to assess its suitability for use.

NOTE If requested, the procedures described in this document can also be used to assess materials intended to be used as stabilizing infills, although not all of the characteristics described in this document are required for stabilizing infills.

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 71-3:2019+A2:2024, *Safety of toys — Part 3: Migration of certain elements*

EN 933-1, *Tests for geometrical properties of aggregates — Part 1: Determination of particle size distribution — Sieving method*

EN 933-2, *Tests for geometrical properties of aggregates — Part 2: Determination of particle size distribution — Test sieves, nominal size of apertures*

EN 1097-3, *Tests for mechanical and physical properties of aggregates — Part 3: Determination of loose bulk density and voids*

EN 12616, *Surfaces for sports areas — Test methods for the determination of vertical water infiltration and horizontal water flow rates*

EN 12229, *Surfaces for sports areas — Procedure for the preparation of synthetic turf and needle-punch test pieces*

EN 12457-4, *Characterisation of Waste Leaching Compliance test for leaching of granular waste materials and sludges — Part 4: One stage batch test at a liquid to solid ratio of 10 l/kg for materials with particle size below 10 mm (without or with size reduction)*

EN 13744, *Surfaces for sports areas — Procedure for accelerated ageing by immersion in hot water*

EN 13817, *Surfaces for sports areas — Procedure for accelerated ageing by exposure to hot air*

EN 14810, *Surfaces for sports areas — Determination of spike resistance*

EN 14836, *Surfaces for sports areas — Synthetic surfaces for outdoor sports areas — Test method for artificial weathering*

EN 14955, *Surfaces for sports areas — Determination of composition and particle shape of unbound mineral surfaces for outdoor sports areas*

EN 15051-2, *Workplace exposure — Measurement of the dustiness of bulk materials— Part 2: Rotating drum method*

EN 17409, *Surfaces for sports areas — Code of practice for the sampling of performance infills used within synthetic turf surfaces*

EN 17467, *Surfaces for sports areas — Test method for the determination of the residual deformation of synthetic or organic infill granules after static load*

EN 20105-A02, *Textiles — Tests for colour fastness — Part A02: Grey scale for assessing change in colour (ISO 105-A02)*

EN ISO 7500-1, *Metallic materials — Calibration and verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Calibration and verification of the force-measuring system (ISO 7500-1)*

EN ISO 9239-1, *Reaction to fire tests for floorings — Part 1: Determination of the burning behaviour using a radiant heat source (ISO 9239-1)*

EN ISO 11358-1, *Plastics — Thermogravimetry (TG) of polymers — Part 1: General principles (ISO 11358-1)*

ISO 3310-1, *Test sieves — Technical requirements and testing — Part 1: Test sieves of metal wire cloth*

ISO 3310-2, *Test sieves — Technical requirements and testing — Part 2: Test sieves of perforated metal plate*

CEN/TS 16384:2012, *Synthetic sport systems — Leaching test*

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