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**BS EN 15330-1:2013**



**BSI Standards Publication**

# **Surfaces for sports areas — Synthetic turf and needle- punched surfaces primarily designed for outdoor use**

Part 1: Specification for synthetic turf surfaces for football, hockey, rugby union training, tennis and multi-sports use

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This British Standard is the UK implementation of EN 15330-1:2013. It supersedes BS EN 15330-1:2007 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PRI/57, Surfaces for sports areas.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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ISBN 978 0 580 78892 5

ICS 97.220.10

**Compliance with a British Standard cannot confer immunity from legal obligations.**

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 September 2013.

#### **Amendments issued since publication**

Date	Text affected
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## EUROPÄISCHE NORM

September 2013

ICS 97.220.10

Supersedes EN 15330-1:2007

English Version

**Surfaces for sports areas - Synthetic turf and needle-punched surfaces primarily designed for outdoor use - Part 1:  
Specification for synthetic turf surfaces for football, hockey, rugby union training, tennis and multi-sports use**

Sols sportifs - Surfaces en gazon synthétique et surfaces en textile aiguilleté principalement destinées à l'usage en extérieur - Partie 1: Spécifications relatives aux surfaces en gazon synthétique destinées à la pratique du football, du hockey ou du tennis, aux entraînements de rugby, ou à un usage multi-sports

Sportböden - Überwiegend für den Außenbereich hergestellte Kunststoffrasenflächen und Nadelfilze - Teil 1: Festlegungen für Kunststoffrasen für Fußball, Hockey, Rugbytraining, Tennis und multifunktionale Kunststoffrasenflächen

This European Standard was approved by CEN on 25 July 2013.

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.

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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

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## Contents

	Page
Foreword.....	4
1 Scope.....	5
2 Normative references.....	5
3 Terms and definitions .....	7
4 Laboratory type approval.....	7
4.1 General .....	7
4.2 Material tests .....	8
4.2.1 Tensile properties of synthetic turf carpet.....	8
4.2.2 Tensile strength of synthetic turf pile yarn(s).....	8
4.2.3 Resistance to artificial weathering of synthetic turf pile yarns.....	8
4.2.4 Synthetic turf carpet joint strength .....	8
4.2.5 Synthetic turf tuft bind.....	8
4.2.6 Water permeability of synthetic turf surfacing system .....	9
4.2.7 Tensile strength of shockpads.....	9
4.2.8 Abrasion resistance of non-filled short pile synthetic turf surfaces .....	9
4.3 Surfaces designed primarily for hockey .....	9
4.3.1 General .....	9
4.3.2 Vertical ball rebound.....	9
4.3.3 Ball roll .....	9
4.3.4 Shock absorption.....	9
4.3.5 Vertical deformation.....	10
4.3.6 Rotational resistance .....	10
4.4 Surfaces designed primarily for football.....	10
4.4.1 General .....	10
4.4.2 Vertical ball rebound.....	10
4.4.3 Ball roll .....	10
4.4.4 Shock absorption.....	10
4.4.5 Vertical deformation.....	10
4.4.6 Rotational resistance .....	10
4.4.7 Resistance to simulated use.....	10
4.5 Surfaces designed primarily for rugby union training areas .....	11
4.5.1 General .....	11
4.5.2 Vertical ball rebound.....	11
4.5.3 Critical fall height .....	11
4.5.4 Shock absorption.....	11
4.5.5 Vertical deformation.....	11
4.5.6 Rotational resistance .....	11
4.5.7 Resistance to simulated use.....	11
4.6 Surfaces designed primarily for tennis.....	12
4.6.1 General .....	12
4.6.2 Vertical ball rebound.....	12
4.6.3 Angled ball behaviour.....	12
4.6.4 Shock absorption.....	12
4.6.5 Rotational Resistance .....	13
4.7 Surfaces designed for multi-sports use.....	13
4.7.1 General .....	13
4.7.2 Vertical ball rebound.....	13
4.7.3 Ball roll .....	13
4.7.4 Shock absorption.....	14

This is a preview of "BS EN 15330-1:2013". [Click here to purchase the full version from the ANSI store.](#)

4.7.5	Vertical deformation .....	14
4.7.6	Rotational resistance .....	14
4.7.7	Angled ball behaviour .....	15
4.7.8	Resistance to simulated use of surfaces designed to allow the use of studded footwear.....	15
4.8	Product identification.....	15
4.9	Test report .....	17
5	Site tests .....	17
5.1	General .....	17
5.2	Test Conditions .....	17
5.3	Performance requirements .....	18
5.3.1	Hockey pitches.....	18
5.3.2	Football pitches.....	19
5.3.3	Rugby pitches .....	20
5.3.4	Tennis courts.....	21
5.3.5	Multi-sports fields.....	22
5.4	Test report .....	26
Annex A (informative)	Selection of the appropriate types of synthetic grass for various sports applications .....	27
Annex B (normative)	Preparation of wet test pieces .....	32
Annex C (informative)	Information to be supplied by the manufacturer or supplier regarding maintenance .....	33
Bibliography.....		34

This is a preview of "BS EN 15330-1:2013". [Click here to purchase the full version from the ANSI store.](#)

## Foreword

This document (EN 15330-1:2013) 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 2014, and conflicting national standards shall be withdrawn at the latest by March 2014.

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

This document supersedes EN 15330-1:2007.

Compared with EN 15330-1:2007, the text has been clarified and editorial errors have been corrected.

EN 15330 consists of the following parts, under the general title *Surfaces for sports areas — Synthetic turf and needle-punched surfaces primarily designed for outdoor use*:

- *Part 1: Specification for synthetic turf surfaces for football, hockey, rugby union training, tennis and multi-sports use;*
- *Part 2: Specification for needle-punched surfaces.*

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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## 1 Scope

This European Standard specifies performance, durability, product identification and facility testing requirements for synthetic turf sports surfaces used primarily outdoors. Five categories of surface are covered, each based on the principal sporting use of the surface, as follows:

- surfaces designed primarily for hockey;
- surfaces designed primarily for association football;
- surfaces designed primarily for rugby union for training purposes;
- surfaces designed primarily for tennis;
- surfaces designed for multi-sports use.

The requirements are intended to apply to surfaces used for community, educational and recreational sport. For professional and elite levels of competition, many sports governing bodies have published their own specifications; the requirements of the sports governing bodies might differ from those detailed in this European Standard and facility developers are advised to ensure that they select surfaces offering the correct level of performance for the level of competition played on the pitch or court.

**NOTE** Under the Laws of the Game of Rugby Union, surfaces for rugby union matches need to comply with the International Rugby Board's IRB Regulation 22 and associated performance specification for synthetic turf surfaces.

This European Standard has two parts. The first part describes the requirements for product testing of products in the laboratory to ensure they are capable of providing the required levels of sports performance and player/surface interaction required for their intended use and that they are manufactured from materials of acceptable quality. The second section describes the requirements for installed surfaces to ensure that the sports performance and player/surface interaction of a facility is suitable for the intended use.

Some of the surfaces covered by this European Standard are designed to allow users to wear footwear fitted with studs. An example of a typical stud is given in EN 15306. For the purposes of this European Standard, multi-dimpled shoe profiles often found on footwear used on sand-filled or non-filled synthetic turfs are not considered to be studs.

When independent third party testing of synthetic turf sports surfaces is required to assess compliance with this standard, it is recommended the laboratory is certified to EN ISO/IEC 17025 for the relevant test methods specified in this standard.

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

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

EN 1177, *Impact attenuating playground surfacing — Determination of critical fall height*

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

EN 12228, *Surfaces for sports areas — Determination of joint strength of synthetic surfaces*