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**Golvmaterial – Sportbeläggningar – Syntetiska
garner – Bestämning av draghållfasthet**

**Surfaces for sports areas – Determination of
tensile strength of synthetic yarns**

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Surfaces for sports areas - Determination of tensile strength of synthetic yarns

Sols sportifs - Détermination de la résistance à la traction des fibres synthétiques

Sportböden - Bestimmung der Zugfestigkeit von synthetischen Garnen

This European Standard was approved by CEN on 13 May 2004.

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 Central Secretariat or to any CEN member.

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EN 13864:2004 (E)

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Foreword

This document (EN 13864:2004) has been prepared by Technical Committee CEN/TC 217 "Surfaces for sports areas", the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by January 2005, and conflicting national standards shall be withdrawn at the latest by January 2005.

This standard is based on ISO 2062 and ISO 5079, noting that synthetic turf fibres are not 'classical' fibres and therefore have to be treated as both textile as well as plastics products.

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

EN 13864:2004 (E)

1 Scope

This European Standard describes two methods for the determination of the tensile properties of pile yarns in the construction of synthetic turf. Method A is used for determining the tensile properties of synthetic yarns taken from packages prior to the manufacture of synthetic turf. Method B is used for determining the tensile properties of pile yarns from the manufactured synthetic turf. The results from the two methods are not comparable and method B is less accurate.

2 Normative references

The following referenced documents are indispensable for the application 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 2062:1995, *Textiles – Yarns from packages – Determination of single-end breaking force and elongation at break (ISO 2062:1993)*

EN ISO 5079:1995, *Textiles - Fibres – Determination of breaking force and elongation at break of individual fibres (ISO 5079:1995)*

ISO 5893, *Rubber and plastics test equipment – Tensile, flexural and compression types (constant rate of traverse) – Specification*

3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN ISO 2062:1995, EN ISO 5079:1995 and the following apply.

3.1

package

length of yarn in a form suitable for use, handling or storage

3.2

initial length

length of a test piece under specified pre-tension, at the beginning of a test

NOTE For a tensile test, the initial length is measured between the two effective clamping points and is expressed in millimetres.

3.3

breaking force

maximum force applied to a test piece carried to rupture during a tensile test under specified conditions

NOTE 1 See A_1 in Figure 1

NOTE 2 The breaking force is expressed in Newtons (N) or centiNewtons (cN)