



SLOVENSKI STANDARD

SIST EN 1509:2009

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SIST EN 1509:2005

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Playing field equipment - Badminton equipment - Functional and safety requirements,
test methods

Spielfeldgeräte - Badminton-einrichtungen - Funktionelle und sicherheitstechnische
Anforderungen, Prüfverfahren

Equipements de jeux - Equipements de badminton - Exigences fonctionnelles et de
sécurité, méthodes d'essai

Ta slovenski standard je istoveten z: EN 1509:2008

ICS:

97.220.30 Oprema za dvoranske športe Indoor sports equipment

SIST EN 1509:2009

en,fr,de

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 1509

November 2008

ICS 97.220.30

Supersedes EN 1509:2004

English Version

**Playing field equipment - Badminton equipment - Functional and
safety requirements, test methods**

Equipements de jeux - Equipements de badminton -
Exigences fonctionnelles et de sécurité, méthodes d'essai

Spielfeldgeräte - Badmintoneinrichtungen - Funktionelle
und sicherheitstechnische Anforderungen, Prüfverfahren

This European Standard was approved by CEN on 5 October 2008.

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 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 Management Centre has the same status as the official versions.

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

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Contents

Page

Foreword.....	3
1 Scope	4
2 Normative references	4
3 Requirements	4
3.1 Classification.....	4
3.2 Designation	4
3.3 Dimensions.....	5
3.4 Material	6
3.4.1 Posts, bottom structure of type 3 and ground fixings.....	6
3.4.2 Net	6
3.4.3 Top net line.....	6
3.5 Design	6
3.5.1 Posts	6
3.5.2 Net	7
3.5.3 Top net line.....	8
3.5.4 Ground sockets.....	8
4 Safety requirements	8
4.1 General.....	8
4.2 Tensioning devices.....	8
4.3 Other fixings.....	8
5 Test methods.....	8
6 Test report	9
7 Instructions for use	9
8 Marking	9
Annex A (informative) Examples of badminton equipment types 1 to 3	10
Annex B (informative) Example of foundation	11

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Foreword

This document (EN 1509:2008) has been prepared by Technical Committee CEN/TC 136 "Sports, playground and other recreational facilities and equipment", the secretariat of which is held by DIN.

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 May 2009, and conflicting national standards shall be withdrawn at the latest by May 2009.

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 1509:2004.

The principal changes from the previous edition of EN 1509 are as follows:

- a) The general safety requirements and test methods have been adapted to the currently updated EN 913 with exclusions.
- b) The scope was extended for indoor standing as well as for indoor wheel chair badminton equipment.
- c) Inclusion of four different classes for the distinction of badminton equipment for competition or training including wheelchair equipment.
- d) Concretion of the requirements on posts and nets.
- e) Inclusion of requirements on the construction of top net lines.
- f) Extension of a new Clause 6 "Test report"
- g) Clause 7 "Instructions for use" and Clause 8 "Marking" were extended.

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

EN 1509:2008 (E)

1 Scope

This European Standard specifies the functional requirements (see Clause 3) and the safety requirements (see Clause 4) for badminton equipment, excluding rackets and shuttlecocks.

This European Standard is applicable to three types and four classes for indoor standing as well as for indoor wheel chair badminton equipment for competition and training (see 3.1).

Other types and sizes as those described in this European Standard are permissible provided the safety requirements of this European Standard are taken into consideration.

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 913, *Gymnastic equipment – General safety requirements and test methods*

EN ISO 1806, *Fishing nets – Determination of mesh breaking force of netting (ISO 1806:2002)*

EN ISO 2307, *Fibre ropes – Determination of certain physical and mechanical properties (ISO 2307:2005)*

3 Requirements

3.1 Classification

Badminton equipment as a whole consisting of a pair of posts and a net shall be classified by the design (types and classes) as shown in Tables 1 and 2.

Table 1 — Types

Type	Description	Example
1	with ground sockets	Figure A.1
2	with bases and ground fixings	Figure A.2
3	freestanding	Figure A.3

Table 2 — Classes

Class	Description
A	Competition standing equipment
B	Competition wheel chair equipment
C	Training standing equipment
D	Training wheel chair equipment

3.2 Designation

Example for the designation of badminton equipment according to this standard of type 1 and class A:

Badminton equipment EN 1509 – 1 – A

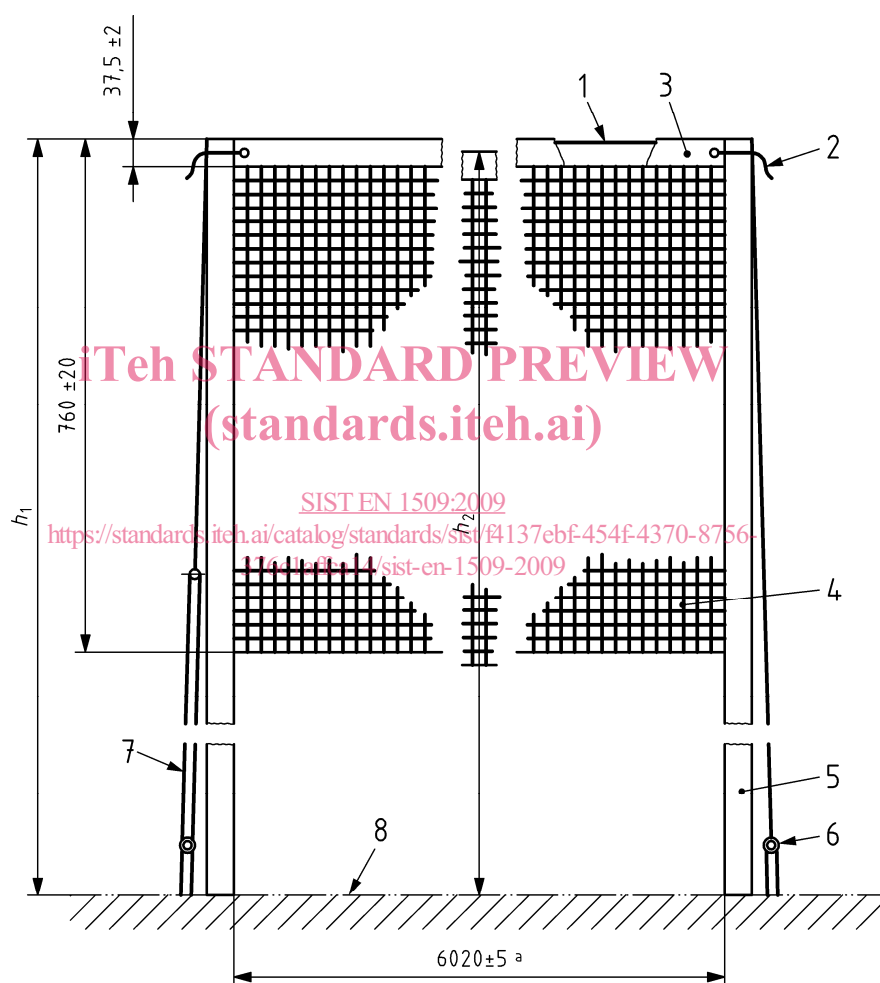
In this designation the elements have the following meaning:

- 1 equipment with ground sockets
A competition standing equipment

3.3 Dimensions

Badminton equipment shall comply with the dimensions shown in Figure 1.

Dimensions in millimetres



Key

- | | |
|--------------------------------|----------------------------------|
| 1 top net line (cord or cable) | 5 post |
| 2 fixing cord | 6 top net line eye |
| 3 top tape | 7 top net line tensioning device |
| 4 net | 8 sport surface |

a This dimension is inside of the field line.

NOTE All badminton equipment consists of two posts and a net.

Figure 1 — Badminton equipment

Table 3 — Heights

	Height of net above the doubles side lines h_1 mm	Height of net in the middle h_2 mm
Classes A and C	1 550	1 524
Classes B and D	1 400	1 374

For classes A and B the gap between the top net line and the top of the post shall be not more than 10 mm (see Figure 2).

Dimensions in millimetres

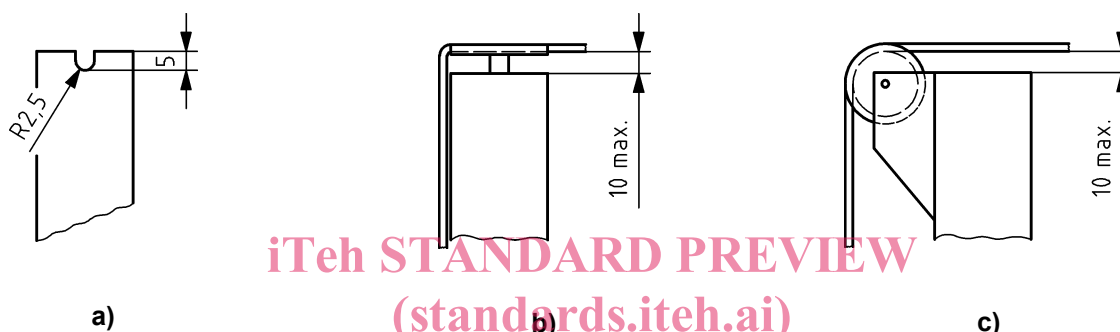


Figure 2 — Examples of the top of post constructions

3.4 Material

3.4.1 Posts, bottom structure of type 3 and ground fixings

These may be made of steel, light metal or synthetics, provided the requirements of this European Standard are fulfilled.

Light metal shall be non-corrosive and steel protected against corrosion (e. g. hot-galvanized, powder coated or painted).

3.4.2 Net

The net shall be made from synthetic fibres.

3.4.3 Top net line

The top net line shall be made from synthetic cord or cable.

3.5 Design

3.5.1 Posts

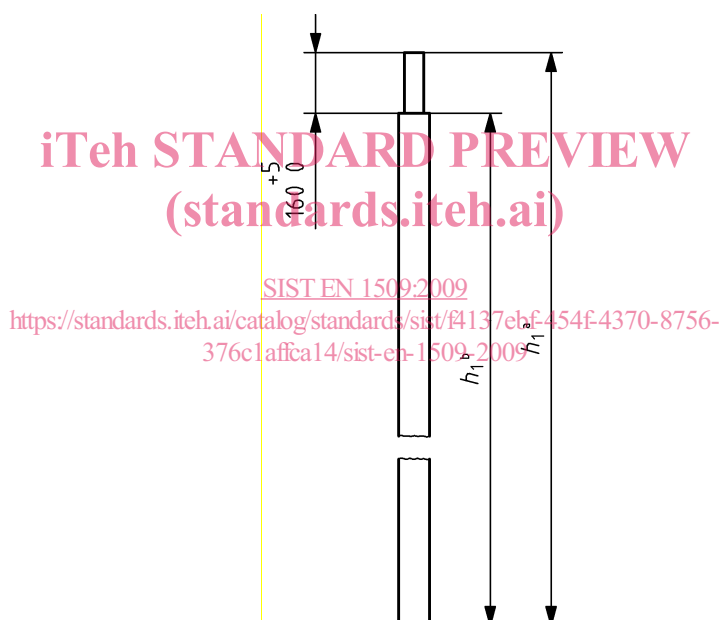
The construction of the posts shall be such that the top net line can be supported or guided at the heights h_1 and height h_2 of Figure 1 and Table 3 at the centre of the court. The posts shall be provided with appropriate fixings for the net.

In position of use the posts shall not move and remain vertical within 88° (towards inside the court) to 91° (towards outside the court) measured over the total length of the post related to the sports surface. For classes A and B the inner post distance shall be between 6 010 mm and 6 020 mm measured at the top of the post.

For classes A and B:

- The 3 sides of the posts orientated towards the court (2 lateral, parallel to the back lines, and 1 facing the court) must have no protuberance into the court;
- Posts should have a dominant colour, excluding vivid, fluorescent or shiny colours;
- Posts should have a consistent profile size of $40 \text{ mm} \pm 1 \text{ mm}$ diameter or $40 \text{ mm} \pm 1 \text{ mm}$ side square);
- For adjustable posts (mainly used for Class B equipment), a reduction of $6 \text{ mm} \pm 1 \text{ mm}$ in the profile shall be accepted. This reduction shall not be longer than $160 \text{ mm} + 5 \text{ mm}$ and the profile reduction cannot be on the lower part of the post (see Figure 3).

Dimensions in millimetres



Key

- ^a For classes A and C according to Table 3
^b For classes B and D according to Table 3

Figure 3 – Profile reduction

For classes C and D other post profiles are allowed provided they do not protrude inside the court line.

3.5.2 Net

In position of use the height of the net shall be $760 \text{ mm} \pm 20 \text{ mm}$ at each end and $\pm 40 \text{ mm}$ in the middle (see Figure 1).

The mesh shall be not less than 15 mm and not more than 20 mm.