

SLOVENSKI STANDARD SIST EN 1176-6:2018

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SIST EN 1176-6:2008

Oprema in podloge otroških igrišč - 6. del: Dodatne posebne varnostne zahteve in preskusne metode za oporne gugalnice

Playground equipment and surfacing - Part 6: Additional specific safety requirements and test methods for rocking equipment

Spielplatzgeräte und Spielplatzböden - Teil/6: Zusätzliche besondere sicherheitstechnische Anforderungen und Prüfverfahren für Wippgeräte

Équipements et sols d'aires de jeux - <u>Rartie 6: Exigen</u>ces de sécurité et méthodes d'essai complémentaires spécifiques aux équipements oscillants 1-b8b0-88b3ab4a7e66/sist-en-1176-6-2018

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97.200.40 Igrišča Playgrounds

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Playground equipment and surfacing - Part 6: Additional specific safety requirements and test methods for rocking equipment

Équipements et sols d'aires de jeux - Partie 6 : Exigences de sécurité et méthodes d'essai complémentaires spécifiques aux équipements oscillants Spielplatzgeräte und Spielplatzböden - Teil 6: Zusätzliche besondere sicherheitstechnische Anforderungen und Prüfverfahren für Wippgeräte

This European Standard was approved by CEN on 15 April 2016.

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



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

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European foreword

This document (EN 1176-6:2017) 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 April 2018, and conflicting national standards shall be withdrawn at the latest by October 2018.

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.

This document supersedes EN 1176-6:2008.

This European Standard EN 1176 "Playground equipment and surfacing" consists of a number of parts as follows:

- Part 1: General safety requirements and test methods
- Part 2: Additional specific safety requirements and test methods for swings
- Part 3: Additional specific safety requirements and test methods for slides
- Part 4: Additional specific safety requirements and test methods for cableways
- Part 5: Additional specific safety requirements and test methods for carousels
- Part 6: Additional specific safety requirements and test methods for rocking equipment
- Part 7: Guidance on installation, inspection, maintenance and operation
- Part 10: Additional specific safety requirements and test methods for fully enclosed play equipment
- Part 11: Additional specific safety requirements and test methods for spatial network

This part of EN 1176 is to be used in conjunction with EN 1176-1, EN 1176-7 and EN 1177.

For inflatable play equipment see EN 14960, *Inflatable play equipment — Safety requirements and test methods*.

The principal changes from the previous edition of this part of EN 1176 are as follows:

- a) type 2, 3 and 4 is not classified as a forced movement equipment;
- b) rocking equipment provided for standing use the falling space shall be at least 1,5 m.

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

Scope 1

This document is applicable to rocking equipment which is used as playground equipment for children, as defined in 3.1. Where the main play function is not rocking, the relevant requirements in this document may be used, as appropriate.

This document specifies additional safety requirements and test methods for seesaws and rocking equipment intended for permanent installation for use by children.

It is intended to provide protection to the user against possible hazards during use.

NOTE Guidance for assessing the safety of other forms of seesaw/rocking equipment is given in informative Annex A.

Normative references 2

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 1176-1:2017, Playground equipment and surfacing — Part 1: General safety requirements and test methods

Terms and definitions 3

For the purposes of this document, the terms and definitions given in EN 1176-1 and the following apply. (standards.iteh.ai)

3.1

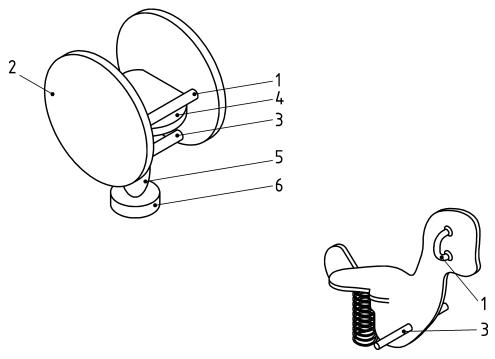
rocking equipment

seesaw (hereinafter referred to as equipment) seesaw (hereinafter re equipment that can be set in motion by the user and is generally characterized by a rigid element that rocks about a central support

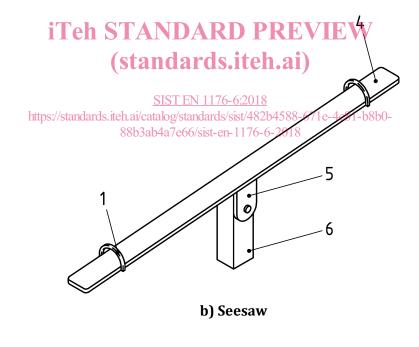
Note 1 to entry: The equipment can have one or several seats or stands.

Note 2 to entry: Figure 1a) shows the principle components for rocking equipment. Figure 1b) shows the principle components for seesaws.

The seesaw/rocking movement depends on the type and configuration of fixture (see Figures 2 Note 3 to entry: to 7).



a) Rocking equipment



Key

1 hand support 4 seat/stand

2 body 5 supporting component

3 foot rest 6 anchorage

Figure 1 — Principal components for rocking equipment/seesaw

3.2 axial seesaw (Type 1)

equipment in which only vertical movement can take place

Note 1 to entry: See Figure 2.

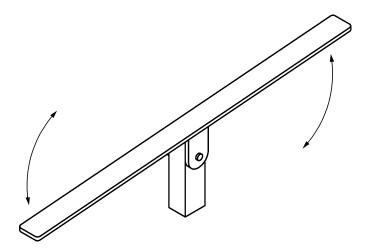


Figure 2 — Example of an axial seesaw (Type 1)

3.3 iTeh STANDARD PREVIEW single point seesaw

single point rocking equipment (Type 2A and 2B)rds.iteh.ai)

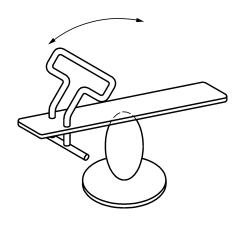
equipment with a single point supporting component

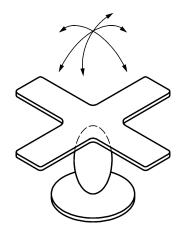
SIST EN 1176-6:2018 Note 1 to entry:

See Figure 3. See Figure Standards.iteh.ai/catalog/standards/sist/482b4588-671e-4c81-b8b0-

88b3ab4a7e66/sist-en-1176-6-2018
Typical single point supporting components include: coils, springs, torsion and compression Note 2 to entry:

blocks.





a) Type 2A with predetermined main direction of movement

b) Type 2B with multi-directional movement

Figure 3 — Examples of single point seesaw/rocking equipment (Types 2A and 2B)

3.4 multi point seesaw

multi point rocking equipment (Types 3A and 3B)

equipment with several supporting components

Note 1 to entry: See Figure 4.

Note 2 to entry: The movement depends upon the placement and type of supporting components.

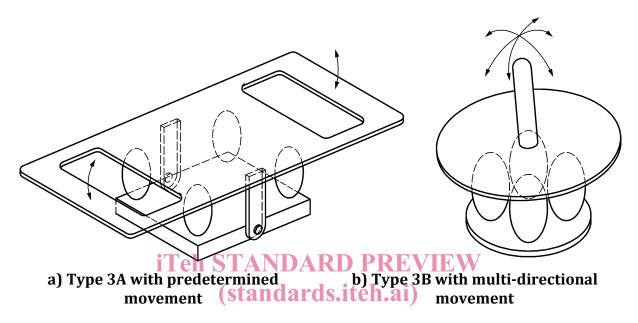


Figure 4 — Examples of multi-point seesaw (Types 3A and 3B) https://standards.iteh.a/catalog/standards/sist/482b4588-671e-4c81-b8b0-

88b3ab4a7e66/sist-en-1176-6-2018

3.5

rocking seesaw (Type 4)

equipment that is fixed so that the movement, which is mainly horizontal, is guided by several parallel axes and moves in one (to fro) direction only

Note 1 to entry: See Figure 5.

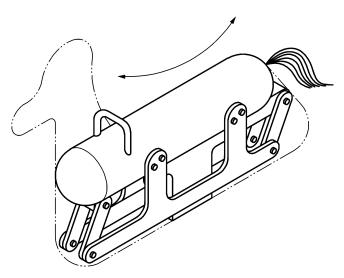
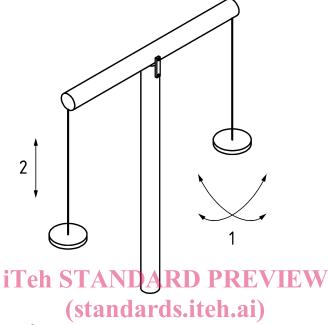


Figure 5 — Example of a rocking seesaw (Type 4)

3.6 sweeping seesaw supported above the users position (Type 5)

equipment in which both vertical and horizontal movement takes place (multi directional), which may result in a sweeping motion

Note 1 to entry: See Figure 6.



Key

- 1 circular movement around central post
- 2 rocking movement <u>SIST EN 1176-6:2018</u> https://standards.iteh.ai/catalog/standards/sist/482b4588-671e-4c81-b8b0-

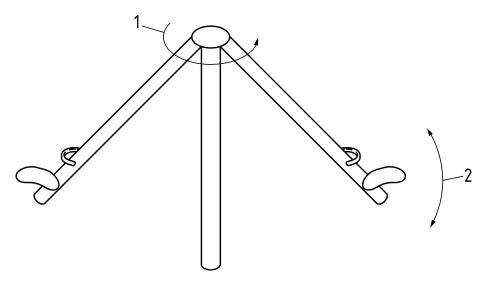
Figure 6 — Example of a sweeping seesaw supported above the users position (Type 5)

3.7

overhead single axis seesaw (Type 6)

equipment with a single overhead rocking axis, where the user stations are flexibly suspended below to provide an additional limited swinging motion

Note 1 to entry: See Figure 7.



1 limited swinging movement STANDARD PREVIEW

2 rocking movement

(standards.iteh.ai)

Figure 7 — Example of overhead single axis seesaw (Type 6)

https://standards.iteh.ai/catalog/standards/sist/482b4588-671e-4c81-b8b0-88b3ab4a7e66/sist-en-1176-6-2018

3.8

equipment body

main moving part connected to the equipment supporting component(s)

3.9

supporting component

component which connects the equipment body to the anchorage

3.10

Anchorage

means by which stability and fixation to the ground/surface is made

3.11

damping

combined effect of the supporting component(s) that moderates the speed at which the equipment can move and the reduction of shock effects at the outer positions of the equipment

3.12

range of movement

maximum horizontal and/or vertical deviation of the seat/stand during use from the centre point at equilibrium position