

AS 4685.2:2021



STANDARDS  
Australia



# Playground equipment and surfacing

## Part 2: Additional safety requirements and test methods for swings (EN 1176-2:2017, MOD)

*This Australian Standard is the adoption of EN 1176-2:2017 with national modifications as set out in the Appendix ZZ to take account of Australian conditions, with the permission of the European Committee for Standardization – CEN, Rue de la Science 23, B – 1040 Brussels, Belgium.*



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- Association of Rotational Moulders Australasia
- Australian Industry Group
- Australian Institute of Landscape Architects
- Children's Health Queensland Hospital and Health Service
- Consumers' Federation of Australia
- Early Childhood Australia
- Engineers Australia
- Institute of Public Works Engineering Australasia
- Kidsafe Australia
- National Association of Testing Authorities Australia
- Occupational Therapy Australia
- Play Australia
- Scouts Australia
- Sports and Play Industry Association
- University of Sydney

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## Part 2: Additional safety requirements and test methods for swings (EN 1176-2:2017, MOD)

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## Preface

This Standard was prepared by the Standards Australia Committee CS-005, Playground Equipment, to supersede AS 4685.2:2014, *Playground equipment and surfacing, Part 2: Additional specific safety requirements and test methods for swings (EN 1176-2:2008, MOD)*.

If a Standard is referenced in legislation, the legislative instrument or regulation specifies the date on which the Standard or Amendment comes into effect. Regulatory Authorities have indicated 12 months as an appropriate transition period from the date of publication for the application of this Standard. Refer to the relevant regulatory authority for further information.

The objective of this document is to specify additional safety requirements for swings intended for permanent installation for use by children. Where the main play function is not swinging, the relevant requirements in this document may be used, as appropriate.

This document is an adoption with national modifications, and has been reproduced from, EN 1176-2:2017, *Playground equipment and surfacing — Part 2: Additional specific safety requirements and test methods for swings*. The modifications are additional requirements and are set out in [Appendix ZZ](#), which has been added at the end of the source text.

[Appendix ZZ](#) lists the variations to EN 1176-2:2017 for the application of this document in Australia.

As this document has been reproduced from an International Standard, the following applies:

- (a) In the source text “this European Standard” should read “this document”.
- (b) A full point substitutes for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

## NOTES

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## European foreword

This document (EN 1176-2:2017) 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 1176-2:2008.

The main changes are:

- a) amended definition of a swing;
- b) additional figure for an example of a swing with one rotational axis (see Figure 1);
- c) new figure on ground clearance (see Figure 7);
- d) new definition and requirements for group swing seats;
- e) improved recommendations for fences around swings;
- f) revised figure for free height of fall and surfacing requirements beneath a swing (see Figure 10);
- g) harmonization of B.4 and B.5 with the measuring device from the EN 1176 series.

This document is part of a series of standards dealing with playground equipment and surfacing which consists of:

- *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 will be used in conjunction with parts EN 1176-1, EN 1176-7 and EN 1177.

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

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.

## 1 Scope

This European Standard specifies additional safety requirements for swings intended for permanent installation for use by children. Where the main play function is not swinging, the relevant requirements in this part of EN 1176 may be used, as appropriate.

NOTE Recommendations on the design and siting of swings are given in Annex A.

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

EN ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories (ISO/IEC 17025)*

ISO 6487, *Road vehicles — Measurement techniques in impact tests — Instrumentation*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1176-1 and the following apply.

NOTE In order not to confine the application of this European Standard to those items of equipment currently in use and to allow freedom of design for the manufacture of new equipment, only the fundamental forms of equipment and motion are defined.

### 3.1 swing

moving equipment where the weight of the user is supported below a pivot or universal joint, where the pivot or universal joint is more than 1,3 m above the ground

### 3.2 swing with one rotational axis (Type 1)

seat that is flexibly suspended individually from a load bearing cross beam that can swing to and fro in an arc at right angles to the cross beam

Note 1 to entry: See Figure 1.