

Australian Standard<sup>®</sup>

**Playground equipment**

**Part 11: Additional specific safety requirements and test methods for spatial networks**

**STANDARDS**  
Australia

The logo for Standards Australia, featuring a stylized graphic of overlapping circles and a swoosh above the text 'STANDARDS Australia'.

This Australian Standard® was prepared by Committee CS-005, Playground Equipment. It was approved on behalf of the Council of Standards Australia on 9 March 2012. This Standard was published on 28 March 2012.

---

The following are represented on Committee CS-005:

- Australian Industry Group
  - Australian Institute of Landscape Architects
  - Department of Education and Children's Services
  - Department of Health, SA
  - Early Childhood Australia
  - Engineers Australia
  - Institute of Public Works Engineering Australia
  - Kidsafe
  - National Association of Testing Authorities Australia
  - Occupational Therapy Australia
  - Play Australia
  - Playtest
  - Royal Children's Hospital, Qld
  - The Play Equipment Importers and Exporters
- 

This Standard was issued in draft form for comment as DR AS 4685.11.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

---

#### **Keeping Standards up-to-date**

Australian Standards® are living documents that reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued.

Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments that may have been published since the Standard was published.

Detailed information about Australian Standards, drafts, amendments and new projects can be found by visiting [www.standards.org.au](http://www.standards.org.au)

Standards Australia welcomes suggestions for improvements, and encourages readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at [mail@standards.org.au](mailto:mail@standards.org.au), or write to Standards Australia, GPO Box 476, Sydney, NSW 2001.

---

Australian Standard<sup>®</sup>

**Playground equipment**

**Part 11: Additional specific safety requirements and test methods for spatial network**

First published as AS 4685.11—2012.

**COPYRIGHT**

© Standards Australia Limited

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968.

Published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001, Australia

ISBN 978 1 74342 060 7

## PREFACE

This Standard was prepared by the Standards Australia Committee CS-005, Playground Equipment.

This Standard is an adoption with national modifications and has been reproduced from EN 1176-11:2008, *Playground equipment and surfacing—Part 11: Additional specific safety requirements and test methods for spatial network* and has been varied as set out in Appendix ZZ to take account of Australian conditions.

The objective of this Standard is to provide Australian designers and operators of children's playground equipment with additional specific safety requirements and test methods for spatial networks, to enhance safety levels for children using this equipment.

As this Standard is reproduced from an International Standard, the following applies:

- (a) Its number appears on the cover and title page while the European Standard number appears only on the cover.
- (b) A full point substitutes for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

<i>Reference to International Standard</i>	<i>Australian Standard</i>
EN	AS
1176 Playground equipment and surfacing	4685 Playground equipment
1176-1 Part 1: General safety requirements and test methods	4685-1 Part 1: General safety requirements and test methods

The term 'normative' has been used in this Standard to define the application of the appendix to which it applies. A 'normative' appendix is an integral part of a Standard.

## CONTENTS

1	Scope .....	4
2	Normative references .....	4
3	Terms and definitions .....	4
4	Safety requirements .....	5
4.1	Protection against falling in spatial network .....	5
4.2	Mesh size in 3-dimensional arranged planar nets.....	6
4.3	Protection against injuries in the falling space .....	7
4.4	Converging parts .....	7
5	Test reports .....	8
6	Marking .....	8

## Playground equipment

### Part 11:

### Additional specific safety requirements and test methods for spatial network

#### 1 Scope

This document specifies additional safety requirements for spatial networks intended for permanent installation for use by children.

This standard is not applicable to artificial climbing structures, which are used for training for sports activities, e.g. alpinism.

#### 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 1176-1:2008, *Playground equipment and surfacing — Part 1: General safety requirements and test methods*

#### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1176-1:2008 and the following apply.

##### 3.1

##### **spatial network**

climbing equipment as geometric 3-dimensional assembly of flexible elements (e.g. ropes, chains, etc.), which by its design will yield

NOTE 1 See Figure 1 for examples.

NOTE 2 Because of the way in which climbing equipment is used (see EN 1176-1:2008, 3.2) if the user were to fall, this would be a vertical downward fall into the structure. Therefore, structural elements outside the net are not considered to be in the falling space.

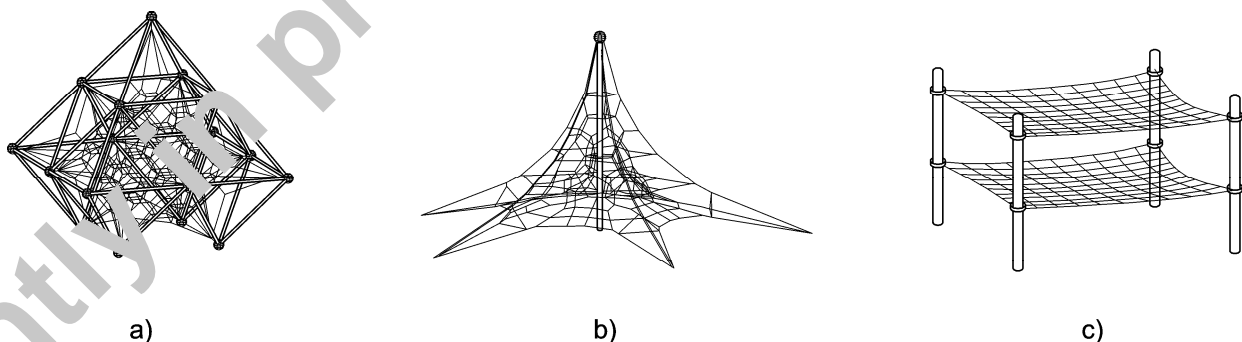


Figure 1 — Examples of spatial network

##### 3.2

##### **3-dimensional arranged planar nets**

3-dimensional assembly of two or more planar nets one above the other

##### 3.3

##### **converging parts**

any two linear elements, i.e. not flat surfaces, the distance between which diminishes along their length