

Australian/New Zealand Standard®

**Playgrounds and playground
equipment**

**Part 1: Development, installation,
inspection, maintenance and
operation**

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee CS/5, Playground Equipment. It was approved on behalf of the Council of Standards Australia on 4 July 1997 and on behalf of the Council of Standards New Zealand on 24 June 1997. It was published on 5 August 1997.

The following interests are represented on Committee CS/5:

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Australian Council of State School Organizations
Australian Early Childhood Association
Australian Local Government Association
Australian Public Risk Insurance Management Association
Australian Retailers Association
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Australian/New Zealand Standard[®]

Playgrounds and playground equipment

Part 1: Development, installation, inspection, maintenance and operation

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee CS/5, Playground Equipment to supersede, in part, AS 2155—1982, *Playgrounds—Guide to siting and to installation and maintenance of equipment* and NZS 5828.1—1986, *Specification for playgrounds and playground equipment*, Part 1: *General guidelines for new and existing playgrounds—Equipment and surfacing*.

It is based on prEN 1176-8, *Playground equipment*, Part 8: *Installation, inspection and maintenance*, and prEN 1176-9, *Playground equipment*, Part 9: *Operation*, which were prepared by the European Committee for Standardization (CEN) Technical Committee 136, Sports Playground and Other Equipment, Subcommittee 1, Playground Equipment for Children. Extensive modifications were made as a result of the public comment received and to incorporate aspects of the previous Australian and New Zealand Standards on playgrounds, AS 2155 and NZS 5828.1, not covered in AS/NZS 4422, *Playground surfacing—Specifications, requirements and test method*.

The term ‘informative’ has been used in this Standard to define the application of the appendix to which it applies. An ‘informative’ appendix is only for information and guidance.

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CONTENTS

	<i>Page</i>
FOREWORD	4
1 SCOPE	5
2 OBJECTIVE	5
3 APPLICATION	5
4 REFERENCED DOCUMENTS	5
5 DEFINITIONS	6
6 GENERAL REQUIREMENTS AND RECOMMENDATIONS	6
7 PLAYGROUND DEVELOPMENT	7
8 MANUFACTURER'S INSTRUCTIONS	11
9 OPERATOR'S INSTRUCTIONS—SAFETY MANAGEMENT SYSTEM	13
APPENDICES	
A SHADE/SUN PROTECTION	16
B PLAYGROUND AND EQUIPMENT SAFETY CHECKLIST	18
C PLAYGROUND SAFETY PROCEDURES	26

FOREWORD

The best way to minimize risk to the children using a playground is to not include hazards in the first place, and to back this up with a plan for dealing with problems as they arise. This Standard contains information on matters that should be considered before a playground is built, so that unnecessary hazards are not built in through a lack of forethought and planning.

To this end, the content of the two CEN drafts (prEN 1176-8, *Playground equipment, Part 8: Installation, inspection and maintenance*, and prEN 1176-9, *Playground equipment, Part 9: Operation*) were amalgamated, because the information required by creators and operators of playgrounds is interlinked with the information which should be provided by the manufacturer. If equipment manufacturers understand the information which a creator or operator needs to take into account, they are more likely to provide it. Similarly if operators know what information they need to correctly select and maintain a playground, they are more likely to ask for it and be able to act on it.

The information has been reorganized into manufacturer's responsibilities and operator's responsibilities, and recognizes that adequate documentation is a necessary part of accountability.

Good intentions are no help to an injured child. However, developing and maintaining a playground in accordance with this Standard will help to minimize the risk of injury occurring. The consequences to a child are the same irrespective of whether the playground has been constructed as a DIY (do-it-yourself) home project, by a service organization as a goodwill project, or by a specialist manufacturing organization, and no matter what the source of the equipment is, consideration needs to be given to the maintenance requirements of the structure created.

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard
Playgrounds and playground equipment

**Part 1: Development, installation, inspection,
maintenance and operation**

1 SCOPE This Standard specifies requirements for the development, installation, inspection, maintenance and operation of playgrounds and playground equipment to ensure a continuing level of function and safety. It also contains requirements for information to be supplied by the manufacturer.

This Standard is applicable to all playground equipment and should be read in conjunction with the current product Standards, AS 1924 Parts 1 and 2 (for Australia) and NZS 5828 Parts 2 and 3 (for New Zealand) and AS/NZS 4422.

NOTES:

- 1 Information on the general requirements for playground equipment is given in AS 1924.1 (for Australia) and NZS 5828.2 (for New Zealand).
- 2 Information on the safety aspects of design and construction of playground equipment is given in AS 1924.2 (for Australia) and NZS 5828.3 (for New Zealand).
- 3 Information on impact absorbing surfacing for use in playgrounds is given in AS/NZS 4422.
- 4 Information on the establishment and supervision of supervised adventure playgrounds is given in AS 2555.

2 OBJECTIVE This Standard is intended to minimize the risk of injury to children using playgrounds by providing guidelines for siting and developing playgrounds, product information requirements, instructions and operating procedures intended to support sound playground design, the selection of appropriate equipment and to minimize operational hazards. The Standard is intended for use by designers, manufacturers and installers of playground equipment as well as the operators of playgrounds.

3 APPLICATION The same hazards face a child from playground equipment whether it is produced by a commercial organization (such as a specialist manufacturer), a voluntary group (such as a service group or a parent organization) or a single individual. The requirements of this Standard therefore apply to all playgrounds and playground equipment.

4 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS

- | | |
|--------|--|
| 1924 | Playground equipment for parks, schools and domestic use |
| 1924.1 | Part 1: General requirements |
| 1924.2 | Part 2: Design and construction—Safety aspects |
| 2555 | Supervised adventure playgrounds—Guide to establishment and administration |

AS/NZS

- | | |
|------|---|
| 4422 | Playground surfacing—Specifications, requirements and test method |
|------|---|

NZS

5828 Specification for playgrounds and playground equipment

5828.2 Part 2: Materials and labelling requirements

5828.3 Part 3: Design and construction—Safety aspects

5 DEFINITIONS For the purpose of this Standard, the definitions in AS/NZS 4422 and those below apply.

5.1 Competent person—a person possessed of the appropriate knowledge, skills and level of responsibility for that task.

5.2 Manufacturer—the party responsible for the design or fabrication of a portion (or all) of the playground or playground equipment is the manufacturer of that portion (or all) of that playground or playground equipment.

5.3 Operator—the person(s) or organization(s) which allows a piece of playground equipment to be used.

5.4 Playground—an area designed for children's play, including the site, natural features, built landscape, and any manufactured equipment. It does not include sites and equipment intended for use in formal sport.

5.5 Playground equipment—includes manufactured structures and impact absorbing surfacing.

5.6 Safety management system—the procedures set up by the operator of the playground to assess, maintain and, if necessary, to improve the safety of the playground as a whole, including the equipment and impact absorbing surfaces.

5.7 Shall—the use of the word 'shall' indicates that a requirement is mandatory.

5.8 Should—the use of the word 'should' indicates that the relevant sentence is not a requirement but is advisory.

6 GENERAL REQUIREMENTS AND RECOMMENDATIONS

6.1 Manufacturer

6.1.1 Information to be supplied The manufacturer shall provide product, installation, inspection and maintenance information for each item of equipment. Illustrations shall be used wherever possible. Written instructions shall be in clear English. All information, whether written or pictorial, shall be legible.

It is recommended that all information be made available prior to acceptance of the order, to aid operators in the selection of the most appropriate equipment for each playground.

6.1.2 Ongoing information The manufacturer should maintain a list of equipment and information supplied to each customer. It is recommended that if updated information on operation and maintenance becomes available (e.g. as a result of product development or because of feedback from incident reports), the manufacturer should supply it to each relevant customer.

6.2 Operator

6.2.1 Selection factors Equipment shall be selected taking into account any general and special needs of the likely users, any limitations of the site, and the level of maintenance that will be required (see also Clause 7). The information outlined in Clause 8 should also be taken into account.

6.2.2 Equipment criteria New equipment shall meet the requirements of the current product Standards (i.e. AS 1924 Parts 1 and 2 (for Australia), NZS 5828 Parts 2 and 3 (for New Zealand) and AS/NZS 4422) when selected.

Existing equipment should be evaluated, and any items which do not meet the requirements of the current product Standards should be dealt with in accordance with Clause 9.8.

6.2.3 Installation Equipment shall be installed in accordance with the manufacturer's instructions.

6.2.4 Inspection and maintenance Equipment shall be regularly inspected and maintained in accordance with Clause 9.

6.2.5 Management The operator shall set up a system for the safety management of the playground based on this Standard.

NOTE: Operators are advised to refer to the relevant occupational health and safety legislation in their state or country, and to determine its applicability to their situation.

7 PLAYGROUND DEVELOPMENT

7.1 Types of play environments Playgrounds can be provided for many types of environments, such as—

- (a) public parks, both supervised and unsupervised;
- (b) commercial premises, both free access and paid access;
- (c) educational centres including primary schools, preschools and kindergartens; and
- (d) childminding facilities including childcare centres, family day care, domestic and playgroups.

7.2 Development factors

7.2.1 General When a playground is to be developed, factors that should be considered include the various roles in play equipment provision, site issues and play equipment design differences for variations in application (e.g. different age groups, abilities or level of supervision).

7.2.2 Roles in play equipment provision Typical roles which may need to be undertaken in the course of providing play equipment include the following:

- (a) Commissioning of the playground.
- (b) Design of the playground.
- (c) Construction of the playground.
- (d) Design of play equipment.
- (e) Purchase of play equipment.
- (f) Manufacture of play equipment.
- (g) On-site manufacture of play equipment.
- (h) Installation of play equipment.
- (i) Provision of impact absorbing surfacing.
- (j) Operation of the playground, including supervision, inspection, maintenance, repair, quarantine and upgrading.
- (k) Use of the playground and its contents.

A responsible individual or organization should be nominated for each of the roles applicable to the particular project, although the same person or organization may be responsible for more than one, or all, roles.