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PLAYGROUNDS—GUIDE TO SITING AND TO INSTALLATION AND MAINTENANCE OF EQUIPMENT



STANDARDS ASSOCIATION OF AUSTRALIA
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This Australian standard was prepared by Committee CS/5, Playground Equipment. It was approved on behalf of the Council of the Standards Association of Australia on 13 July 1982 and published on 16 August 1982.

The following interests were represented on the committee responsible for the preparation of this standard:

Attorney General's Department
Australian Consumers Association
Australian Federation of Consumer Organizations
Australian Council of State School Organizations
Australian Retailers Association
Australian Toy Association
Confederation of Australian Industry
Department of Health
Department of Industrial Relations, New South Wales
Department of Labour and Industry, Victoria
Education Department of New South Wales
Education Department of Victoria
Health Commission of New South Wales
Industrial Design Council of Australia
Kindergarten Union of New South Wales Incorporated
Local Government Association of New South Wales
Metal Trades Industry Association of Australia
Ministry of Consumer Affairs, Victoria
Municipal Association of Victoria
National Safety Council of Australia (Victorian Division)
Plastics Institute of Australia Incorporated
Playgrounds and Recreation Association of Victoria
Royal Children's Hospital, Melbourne

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AUSTRALIAN STANDARD

PLAYGROUNDS—GUIDE TO SITING AND TO INSTALLATION AND MAINTENANCE OF EQUIPMENT

AS 2155—1982

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PREFACE

This edition of this standard was prepared by the Association's Committee on Playground Equipment to supersede AS 2155—1980.

It is intended to complement the standard for playground equipment, AS 1924, Playground Equipment for Parks, Schools and Domestic Use, Part 1—General Requirements, and Part 2—Design and Construction—Safety Aspects.

This edition is technically identical with the 1980 edition, but incorporates an additional check point in the listing for slides in Paragraph A4 of Appendix A. Several digital amputations have occurred over the past 3 years when children had their fingers or thumbs caught in openings that had developed between the sides of the slide and the sheet metal forming the chute. The check list now highlights the need for the sides of slides to be checked regularly for such gaps, which could be caused through breaks in the welds or through bad design or manufacture. The latter aspects are covered in AS 1924, Part 2, as amended. In this edition the title has been changed in accordance with current SAA policy and other minor editorial changes have been made.

This standard, together with AS 1924, Parts 1 and 2, and AS 2555, Supervised Adventure Playgrounds—Guide to Establishment and Administration, is intended to assist councils, community groups, schools, kindergartens and play groups, etc in establishing safer and more creative and imaginative playing areas.

The committee emphasizes that the site for a playground must be chosen with great care and that any available piece of vacant land or space is not necessarily suitable.

Safe access is a fundamental requirement if the playground is to be used. Therefore, when housing schemes or subdivisions are being planned, playground facilities for the children who will live in the area must have a high priority and be considered in the early stages of planning.

Professional advice should be sought and children should be involved in planning to ensure that the playground satisfies their ideas of play and not those of adults.

Unsupervised playing spaces in residential areas should be situated so that they are within sight of nearby houses or well-used pedestrian routes to reduce the risk both of undesirable people visiting the playground and of vandalism.

Records of accidents in playgrounds show that several serious accidents and at least one fatality have resulted from the failure of equipment due to lack of maintenance and inspection. Emphasis has been placed on these two aspects and the need for detailed records to be kept of inspections and maintenance work. Check lists and a suggested record form are given as a guide to an appendix.

The placing of items of equipment in relation to one another and the surfacing that is under equipment play a vital role in reducing potential hazards.

This standard requires reference to AS 1924, Parts 1 and 2, and to AS 1237, Flat Metal Washers for General Engineering Purposes.

CONTENTS

	<i>Page</i>
STANDARD	
1 Scope	3
2 Application	3
3 Referenced Documents	3
4 Establishment	4
5 Installation of Equipment	5
6 Maintenance	
APPENDIX A. Suggested Form for Recording Inspections and Maintenance Work Undertaken	7

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard

for

PLAYGROUNDS—GUIDE TO SITING AND TO INSTALLATION AND MAINTENANCE OF EQUIPMENT

1 SCOPE. This standard sets out guidelines on the siting of playgrounds and the installation and maintenance of playground equipment in both supervised and unsupervised playgrounds.

2 APPLICATION. The standard is applicable to playgrounds in parks, open spaces, shopping centres, caravan parks, and those sited in school grounds and kindergartens.

3 REFERENCED DOCUMENTS. The following standards are referred to in this standard:

- | | |
|---------|--|
| AS 1237 | Flat Metal Washers for General Engineering Purposes |
| AS 1924 | Playground Equipment for Parks, Schools and Domestic Use
Part 1—General Requirements
Part 2—Design and Construction—Safety Aspects |

4 ESTABLISHMENT.

4.1 General. Professional advice should be sought regarding the site for, and the planning of, a playground and to ensure that the playground will be designed to develop and encourage children's creative ideas of play. In order to satisfy their needs children should be involved in the planning stages. There should be adequate capacity for invention within the play spaces and equipment to allow children to vary their patterns of play. Consideration should also be given to the provision of access to areas and equipment which can be used and enjoyed by handicapped children. The involvement of adults in the development of the area will help to ensure the successful use of a playground.

Some of the factors which should be considered in establishing a playground are outlined in Clauses 4.2 to 4.8.

4.2 Site Selection. When the need for a playground in an area has been established the most suitable site will be one which—

- (a) is located at a safe distance from hazards such as lakes, rivers, creeks, motor traffic and sporting facilities, e.g. bicycle tracks or behind goalposts;
- (b) is suitable for the children in the age range expected to make maximum use of the facilities;
- (c) is within sight of local residents who would become aware of any accident or of the presence of any undesirable visitors; and
- (d) has been chosen with regard to the local climatic conditions, e.g. wind, sun, rain, shade, and the rights of local residents with regard to their privacy and the possible noise factor.

4.3 Landscaping. A flat, featureless and treeless playground or play space which is uninteresting and visually unpleasing should be avoided. If such a site

is the only one available, contouring related to climatic conditions, to the equipment to be used, and to the surrounding area and dwellings should be carefully planned to increase the character of the site. Expert advice should be sought regarding suitable trees and shrubs on all sites, particularly with regard to falling limbs and to species that are poisonous or prickly. Wherever possible the natural landscape and suitable trees should be retained.

4.4 Layout. The layout of the various types of playing areas and equipment is the key to the safety and enjoyment of the users, and should take account of the following:

- (a) Placement of equipment should be such that vigorous movement areas do not impinge on quieter areas.
- (b) Swings and slides where provided for use by children over a wide age range should cater for age and size difference, with some separation of older children from those 8 years of age and under by the use of natural barriers such as hedges or contouring.
- (c) Wherever possible, slides should be built to give access from embankments or mounds.
- (d) Variation in spaces for play should include definition of small spaces for small group play as well as larger open spaces.
- (e) Shelter, drinking fountains, taps and toilet facilities are required in larger playgrounds.
- (f) If signs are necessary these should be positive in nature, encouraging the use and care of the playground.
- (g) In supervised playgrounds where activities such as crafts or play requiring portable equipment are possible, a suitable lockup storage area should be provided.

4.5 Services. The need for electricity, water, sewerage and garbage services and telephone and emergency services should be considered

4.6 Regulations, Covenants, etc. At all times there should be close liaison with the authority or the local, State or Federal Government department which has jurisdiction over the area regarding any regulations, covenants or restrictions which might apply to the site under consideration.

4.7 Site Information. The following physical properties should be considered to establish suitability of the site and the approximate site preparation cost:

- (a) Surface levels and gradients.
- (b) Soil.
- (c) Subsoil.
- (d) Water table.
- (e) Nearest sewers.