

AS 2818—1986

Australian Standard[®]

**GUIDE TO SWIMMING POOL
SAFETY**

This Australian standard was prepared by Committee CS/34, Safety of Private Swimming Pools. It was approved on behalf of the Council of the Standards Association of Australia on 11 August 1986 and published on 5 September 1986.

The following interests are represented on Committee CS/34:

Citizens Private Swimming Pool Safety Committee
Confederation of Australian Industry
Consumer Affairs Bureau, Qld.
Council of Australasian Spa and Pool Associations Limited
Department of Consumer Affairs, N.S.W.
Department of Health, N.S.W.
Department of Local Government, W.A.
Department of Sport and Recreation, N.S.W.
Local Government Association of N.S.W.
Municipal Association of Victoria
National Safety Council of Australia (N.S.W. Division)
National Safety Council of Australia (S.A. Division)
Royal Australian Institute of Architects
Royal Life Saving Association, Australia

Review of Australian Standards. *To keep abreast of progress in industry, Australian Standards are subject to periodic review and are kept up to date by the issue of amendments or new editions as necessary. It is important therefore that Standards users ensure that they are in possession of the latest edition, and any amendments thereto.*

Full details of all Australian Standards and related publications will be found in the Standards Australia Catalogue of Publications; this information is supplemented each month by the magazine 'The Australian Standard', which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.

Suggestions for improvements to Australian Standards, addressed to the head office of Standards Australia, are welcomed. Notification of any inaccuracy or ambiguity found in an Australian Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

Australian Standard[®]

**GUIDE TO SWIMMING POOL
SAFETY**

First published (as SAA MP 33)	1977
Revised	1980
AS 2818 first published	1985
Second edition	1986

PREFACE

This standard was prepared by the Association's Committee on Safety of Private Swimming Pools. It supersedes AS 2818–1985, Guide to Swimming Pool Safety, which in turn superseded SAA MP 33–1980, SAA Guide to Swimming Pool Safety.

It was proposed at the time of preparation of AS 2818–1985 that certain requirements relating to the design of private swimming pools would be incorporated into a separate standard written in a mandatory style rather than the advisory style of this guide. Included in these requirements were minimum dimensions for diving pools.

Upon investigation it was found that the existence of the two standards would have created confusion in the minds of those members of the general public who were looking for information on pool safety. Furthermore, it was found that Regulatory Authorities made little distinction between mandatory and advisory requirements in standards when requirements were being incorporated into regulations. For these reasons it was decided not to prepare a separate standard for requirements for the design of private swimming pools but rather to incorporate them into this edition of AS 2818.

The Committee looked into the problem of serious injuries resulting from diving into private swimming pools. It was considered that no private swimming pool could be recommended as absolutely safe for the inexperienced person to dive into. Minimum dimensions for diving pools have therefore not been included.

CONTENTS

	<i>Page</i>
FOREWORD	3
1 SCOPE	4
2 APPLICATION	4
3 REFERENCE DOCUMENTS	4
4 DEFINITIONS	4
5 RESPONSIBILITY FOR SUPERVISION	4
6 LEGAL LIABILITY	4
7 UNDERWATER DIMENSIONS	4
8 DIVING POOLS	4
9 POOL FENCING	5
10 POOL COVERS	8
11 WARNING DEVICES AND ALARMS	8
12 ABOVE-GROUND POOLS	8
13 SKIMMER BOXES	9
14 SUCTION POINTS	9
15 INSTRUCTIONS	10
16 SAFETY FEATURES	10
17 SAFETY IN POOL MAINTENANCE	10
18 ELECTRICAL SAFETY	11
19 SAFETY IN POOL USE	11

© Copyright — STANDARDS AUSTRALIA

Users of Standards are reminded that copyright subsists in all Standards Australia publications and software. Except where the Copyright Act allows and except where provided for below no publications or software produced by Standards Australia may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from Standards Australia. Permission may be conditional on an appropriate royalty payment. Requests for permission and information on commercial software royalties should be directed to the head office of Standards Australia.

Standards Australia will permit up to 10 percent of the technical content pages of a Standard to be copied for use exclusively in-house by purchasers of the Standard without payment of a royalty or advice to Standards Australia.

Standards Australia will also permit the inclusion of its copyright material in computer software programs for no royalty payment provided such programs are used exclusively in-house by the creators of the programs.

Care should be taken to ensure that material used is from the current edition of the Standard and that it is updated whenever the Standard is amended or revised. The number and date of the Standard should therefore be clearly identified.

The use of material in print form or in computer software programs to be used commercially, with or without payment, or in commercial contracts is subject to the payment of a royalty. This policy may be varied by Standards Australia at any time.

FOREWORD

The effectiveness of any installed safety measures is dependent on their proper use or observance by the pool user.

The information and recommendations in this guide are intended to provide advice to pool users in the interest of pool safety. It is intended that the pool owner, having regard to such considerations as the ages of his or her children, the layout of the house and land, etc, should determine which recommendations are appropriate for a particular situation.

Because a significant majority of the victims of drownings in private pools are children under the age of five years, this guide is primarily aimed at providing recommendations for the protection of children of this age group. The guide also includes, however, recommendations on other aspects of pool safety which may relate to persons of all ages. The recommendations set out are mainly concerned with preventive safety rather than first-aid measures, which are already well established and widely publicized.

STANDARDS ASSOCIATION OF AUSTRALIA

**AUSTRALIAN STANDARD
GUIDE TO SWIMMING POOL SAFETY**

1 SCOPE. This standard provides guidance on the prevention of accidental drownings and injuries in private swimming pools and spas and identifies potential hazards in the use and maintenance of private swimming pools. It does not encompass design features for private spas which are specified in AS 2610 Part 2.

2 APPLICATION. This standard is applicable to swimming pools and spas which are located outside buildings on residential properties such as private homes, flats, home units, and on other properties such as schools, motels, hospitals, institutions and the like.

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

AS 1926	Fences and Gates for Private Swimming Pools
AS 2610	Spa Pools Part 2—Private Spas
AS 3000	SAA Wiring Rules
AS XXXX	Sanitization of Private Swimming Pools*
Attention is drawn to the following related standards:	
AS 1838	Premoulded Reinforced Plastics Swimming Pools
AS 1839	Code of Practice for In-ground Installation of Premoulded Reinforced Plastics Swimming Pools
AS 2020	Safety Covers for Private Swimming Pools and Wading Pools (For the Protection of Children 5 Years of Age and Under)
AS 2160	Contract for Supply and Construction of a Swimming Pool
AS 2233	Safety Ladders for Above-ground Swimming Pools
AS 2783	The Use of Reinforced Concrete in Small Swimming Pools (Known as SAA Concrete Swimming Pools Code)
AS 2820	Gate Units for Private Swimming Pools

4 DEFINITIONS. For the purpose of this standard, the following definitions apply:

4.1 Diving pool—a pool which is deep enough for a sufficient length of the pool and wide enough to allow for the safe use of diving apparatus.

4.2 Inlets—openings in the pool wall or floor through which water enters the pool.

4.3 Skimmer box—the fitting attached to or set in the pool wall at water level used as the main suction point for the filter pump and intended to draw water from the pool surface to remove and collect debris.

4.4 Suction points—openings in the pool wall or floor through which water leaves the pool.

4.5 Swimming pool—any structure capable of being filled with water to a depth greater than 300 mm and

primarily intended to be used for swimming, wading or paddling.

4.6 Spa—a water-retaining structure with a capacity of not less than 680 L with which is associated the facility for heating the water contained in it and injecting air bubbles or jets of turbulent water.

4.7 Splasher (wading) pool—any structure capable of being filled with water to a depth not greater than 300 mm and intended to be used by young children.

4.8 Young child—a child under the age of five years.

5 RESPONSIBILITY FOR SUPERVISION. It is emphasized that supervision by an adult is essential whenever young children are near a pool.

Parents should be aware that young children cannot understand concepts such as safety, danger, drowning and death. Also, they forget quickly, thus constant training and practice are necessary to maintain awareness and competence.

Even though a young child has been taught to float and swim, vigilance and supervision should not be relaxed. The child's ability may be affected by cold water, shock or a combination of these, which may lead to drowning.

Drownings of young children typically have two features: silence and speed. There is seldom a splash or a call for help when the child falls in and the child's involuntary actions turn him or her face-down once in the water. Within as little as 30 seconds the child can become unconscious.

The need for constant supervision cannot be over-emphasized.

6 LEGAL LIABILITY. Swimming pool owners should be aware that where death or injury to any person occurs in their pool a legal liability may fall upon them or upon the person responsible for the pool at the time of such incident.

7 UNDERWATER DIMENSIONS. Pools other than diving pools should be designed so that at all points around their circumference, except at steps or swim-outs, the wall of the pool is vertical (to within 13°) from the water level down to half the depth of the pool at that point. Offset ledges, where provided, should fall within a 13° line from vertical (see Fig. 1).

8 DIVING POOLS. Diving boards should not be installed unless the pool is deep enough for a sufficient length and wide enough to allow them to be used safely. Serious injury can result from diving into a pool that is not of sufficient size. Where a diving board is to be installed in a new or existing pool, the relevant pool dimensions should be as set out in the FINA regulations.

NOTE: Details of the FINA (Federation Internationale de Natation Amateur) regulations are available from the appropriate State Diving Association.

* In course of preparation.