Australian Standard<sup>™</sup>

# Swimming pool safety

Part 1: Fencing for swimming pools



This Australian Standard was prepared by Committee CS/34, Safety of Private Swimming Pools. It was approved on behalf of the Council of Standards Australia on 12 March 1993 and published on 26 July 1993.

The following interests are represented on Committee CS/34:

Australian Chamber of Commerce and Industry

Australian Chamber of Manufactures

Australian Uniform Building Regulations Coordinating Council

Child Accident Prevention Foundation of Australia

Department of Housing, Local Government and Planning, Queensland

Department of Local Government and Co-operatives, N.S.W.

Fence Industry Association of Australia

Health Department, Western Australia

Metal Trades Industry Association of Australia

National Injury Surveillance Unit

National Safety Council of Australia (S.A. Division)

Office of Planning and Urban Development, South Australia

Pool Fencing Action Group, N.S.W.

Pool Owners Objection Lobby, Queensland

Swimming Pool and Spa Association of Australia

#### Keeping Standards up-to-date

Standards are living documents which 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 Standards may also be withdrawn.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 which may have been published since the Standard was purchased.

Detailed information about Standards can be found by visiting the Standards Australia web site at www.standards.com.au and looking up the relevant Standard in the on-line catalogue.

Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, *The Australian Standard*, has a full listing of revisions and amendments published each month.

We also welcome suggestions for the improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.com.au, or write to the Chief Executive, Standards Australia International Ltd, PO Box 1055, Strathfield, NSW 2135.

This Standard was issued in draft form for comment as DR 91180.

# Australian Standard™

# Swimming pool safety

# Part 1: Fencing for swimming pools

First published as AS 1926—1976. Previous edition 1986. Revised and redesignated AS 1926.1—1993. Reissued incorporating Amendment No. 1 (June 2000).

### COPYRIGHT

© Standards Australia International

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.

Published by Standards Australia International Ltd PO Box 1055, Strathfield, NSW 2135, Australia ISBN 0 7337 8342 8

#### PREFACE

This Standard was prepared by the Standards Australia Committee on Safety of Private Swimming Pools to supersede AS 1926—1986, *Fences and gates for private swimming pools*.

This Standard incorporates Amendment No. 1 (June 2000). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure, or part thereof affected.

This Standard is part of a series dealing with fencing, location of fencing and water recirculation and filtration systems.

The series of Standards is as follows:

AS

1926 Swimming pool safety

1926.1 Part 1: Fencing for swimming pools (this Standard)

1926.2 Part 2: Location of fencing for private swimming pools

1926.3 Part 3: Water recirculation and filtration systems

This edition incorporates the following major changes from the previous document:

(a) Requirements for windows, doors, balconies and retaining walls are included.

(b) Requirements for above-ground pools are included.

(c) Inclusion of a strength test for flexible materials.

This Standard establishes safety requirements for design, construction and performance of fencing, windows and doorsets for swimming pools of the types normally installed for private use; however it is also applicable for public use if consideration is taken of the differing *dynamics* of public swimming pools to private swimming pools.

Statistical evidence shows that the majority of drownings in private swimming pools involve children under five years of age. For that reason, the requirements established by the Standard are directed at obtaining a barrier that will make it difficult for a young child to gain access to a pool area, whether under, over or through the fencing.

It should be noted that the provisions of this Standard relate to fencing that is intended to be child resistant but not childproof, as effectiveness of the fencing is very much dependent on its location and installation.

The requirements are established with the intention of leaving a high degree of flexibility to the consumer in the choice of fence, desirable aesthetics and cost.

Requirements for the effective use of fencing in protecting children from pool hazards are given in AS 1926.2. A Standard for gate units for private swimming pools is set out in AS 2820, which is intended for use by manufacturers who are seeking certification that their products comply with the Standard.

# CONTENTS

		Page
SECT	TION 1 SCOPE AND GENERAL	
1.1		4
1.2		
1.3		
		-
SECT	TION 2 DESIGN AND CONSTRUCTION	
2.1	GENERAL	6
2.2	2 MATERIALS	6
2.3	FENCING HEIGHT	6
2.4	RETAINING WALL OR OTHER SUCH BARRIER	6
2.5	GROUND CLEARANCE	. 6
2.6	OUTSIDE SURFACE	. 9
2.7	HORIZONTAL CLIMBABLE MEMBERS	. 9
2.8	B HORIZONTAL NON-CLIMBABLE MEMBERS	. 9
2.9	HORIZONTAL SURFACES INSIDE THE FENCING	. 9
2.1	0 VERTICAL MEMBERS	. 9
2.1	1 GATES AND FITTINGS	. 9
2.1	2 FINISH	11
2.1	3 CHILD-RESISTANT OPENABLE PORTION OF WINDOW	11
2.1	4 CHILD-RESISTANT DOORSET	12
2.1	5 ABOVE-GROUND POOLS	12
2.1	6 BALCONY	12
anar		
	TION 3 PERFORMANCE	1.7
3.1		
3.2		
3.3		
3.4	CLOSING AND LATCHING OF GATES	15
APPE	ENDICES	
А	TEST FOR STRENGTH AND RIGIDITY OF FENCING OPENINGS	16
В	STRENGTH TEST FOR POSTS AND FOOTINGS	17
С	STRENGTH TEST FOR RIGID FENCINGS COMPONENTS	18
D	STRENGTH TEST FOR FLEXIBLE MATERIALS AND COMPONENTS	
E	EXAMPLES OF POOL FENCES	

## STANDARDS AUSTRALIA

## Australian Standard Swimming pool safety

## Part 1: Fencing for swimming pools

## SECTION 1 SCOPE AND GENERAL

**1.1 SCOPE** This Standard specifies requirements for the design, construction and performance of fences, gates, retaining walls, windows, doorsets and balconies intended to form part of a barrier that will restrict the access of young children to swimming pools.

NOTES:

- 1 The Standard for gate units for private swimming pools (AS 2820) is intended for use by manufacturers of pool gates who are seeking certification that their products comply with the Standard. It is not intended for use by householders or regulatory authorities when assessing pool fencing installations. In such cases this Standard should be used.
- 2 Public swimming pools have different human dynamics, such as increased gate usage, crowd behaviour and supervision, and the duplication of the requirements of this Standard may not always be appropriate.
- 3 Appendix E gives a broad guide to some of the key construction criteria which needs to be met by some of the more common types of fencing, in order to comply with the requirements of this Standard.
- 4 This Standard is intended to be referenced in the Building Code of Australia by way of an Amendment, due to be published around March 1994, thereby superseding the previous edition, AS 1926—1986, which will be withdrawn 12 months from the date of issuance of the BCA Amendment.

Users are advised that when the BCA Amendment is issued, it will not necessarily be gazetted in each State/Territory at the time of printing.

**1.2 REFERENCED DOCUMENTS** The following document is referred to in this Standard:

AS

2820 Gate units for private swimming pools

**1.3 DEFINITIONS** For the purpose of this Standard, the definitions below apply.

**1.3.1** Child-resistant doorset—comprises a door, door frame, self-closing device and self-latching device, that is designed to provide an access way through the intended barrier.

**1.3.2 Fence**—the assembly of components natural or otherwise, which form the intended barrier to the pool, exclusive of gates or doorsets. The fence includes items such as posts and panels, constructed or natural walls, sides of buildings, child-resistant windows, balustrades on a balcony, where they form part of the intended barrier.

**1.3.3 Fencing**—a barrier comprising a fence and associated gate or gates, or child-resistant doorsets.

**1.3.4** Fencing height—the height perpendicular to the finished ground level at any point along the length of the fencing, measured on the outside of the fencing (see Figure 2.1).



# The remainder of this document is available for purchase online at <u>www.saiglobal.com/shop</u>

SAI Global also carries a wide range of publications from a wide variety of Standards Publishers:















Click on the logos to search the database online.