

Australian Standard<sup>®</sup>

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**SPA POOLS**  
**Part 1—PUBLIC SPAS**

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This Australian standard was prepared by Committee C5/59, Spa Pools. It was approved on behalf of the Council of the Standards Association of Australia on 11 January 1983 and published on 7 March 1983.

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

Australian Consumers Association  
Australian Institute of Health Surveyors  
Confederation of Australian Industry  
Council of Australasian Spa & Pool Associations Ltd  
Department of Consumer Affairs, N.S.W.  
Department of Health, N.S.W.  
Department of Sport and Recreation, N.S.W.  
Local Government Association of New South Wales  
National Safety Council of Australia (S.A. Division)  
Plastics Institute of Australia Inc.  
Royal Australian Institute of Architects

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## PREFACE

This standard was prepared by the Association's Committee on Spa Pools in response to a request from the Council of Australasian Spa and Pool Associations, which felt that the construction and installation of spa pools was not adequately provided for by existing standards.

The standard applies to 'public spas', as defined in the standard. Private spas are covered by AS 2610, Part 2.

The need for suitable standards for safety, health and sound design and construction is felt to be all the more apparent in the light of the increasing popularity of spa pools. The health and safety of users of spas depends not only upon proper design and construction, but also upon vigilant supervision by operators and other sound operating procedures. Recommended procedures for operators of public spa pools to enable the maintenance of sanitary spa water within the chemical operational parameters contained in Appendix A are set out in Appendix D.

In the preparation of this standard, particular attention was given to safety aspects related to the use of spas, and the requirements of this standard have been based on the work of the U.S. National Swimming Pool Institute. However, a number of significant alterations have been made, in order to make the standard suitable for Australian conditions.

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## STANDARDS ASSOCIATION OF AUSTRALIA

## Australian Standard

for

## SPA POOLS

## PART 1—PUBLIC SPAS

## SECTION 1. SCOPE AND GENERAL

**1.1 SCOPE.** This standard specifies requirements for the design, construction and operation of public spa pools intended for recreational use, as defined in Clause 1.3, that are either separately installed or form part of a swimming pool installation. It is not applicable to spas with a capacity of less than 680 L, commonly known as 'spa baths', or to spa pools that are used under the direction of medical personnel, such as hydrotherapy pools.

**1.2 REFERENCED DOCUMENTS.** The following documents are referred to in this standard:

- AS 1159 Polyethylene (Polythene) Pipe for Pressure Applications
- AS 1477 Unplasticized PVC (UPVC) Pipes and Fittings for Pressure Applications
- AS 1668 SAA Mechanical Ventilation and Airconditioning Code  
Part 1— Fire Precautions in Buildings with Air-handling Systems  
Part 2— Ventilation Requirements
- AS 3000 SAA Wiring Rules
- BS 5391 Specification for Acrylonitrile-butadiene-styrene (ABS) Pressure Pipe  
Part 1—Pipe for Industrial Uses
- AS 5392 Specification for Acrylonitrile-butadiene-styrene (ABS) Fittings for Use with ABS Pressure Pipe  
Part 1— Fittings for Use with Pipe for Industrial Uses
- AG 110 Approval Requirements for Swimming Pool Heaters\*.

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

**1.3.1 Abrasion hazard**—a sharp or rough surface that would scrape the skin upon chance contact or in normal use.

**1.3.2 Air injection system**—a system whereby air (only) is forced into hollow ducting built into a spa floor, bench or other location. The air injection system is activated by a separate air power unit (blower).

**1.3.3 Backwash**—the process of cleansing the filter media and/or elements by reverse flow.

**1.3.4 Breakpoint chlorination**—the destruction of chloramines by superchlorination. Chloramines are determined in the spa water as 'combined chlorine', which is the

difference between 'total chlorine' and 'free chlorine'.

**1.3.5 Capacity**—the volume of water the spa contains when measured from the appropriate waterline described in Clause 2.4.1.

**1.3.6 Casual contact**—contact of any body part occurring by chance or by normal use modes.

**1.3.7 Cutting hazard**—a sharp edge that would cut the skin upon chance contact or in normal use.

**1.3.8 Floor**—the bottom interior surface of the spa pool, including that part of the surface from a horizontal plane up to a maximum of 1:12 slope.

**1.3.9 Inlets**—those openings in the spa wall or floor through which water enters the pool.

**1.3.10 Jet inlet fittings**—a fitting which blends air and water creating a high velocity, turbulent stream of air-enriched water.

**1.3.11 Ladder**—an appliance consisting of two stiles† joined at regular intervals by cross-pieces called rungs‡, on which a person may rest or step in ascending or descending.

**1.3.12 Lining**—the material on the inner surface of the spa structure in contact with the water.

**1.3.13 Outlets**—those openings in the spa wall or floor through which water leaves the pool.

**1.3.14 Surface skimming system**—perimeter type overflows, surface skimmer weirs and surface water collection systems of various designs and manufacture.

**1.3.15 Pinching hazard**—any configuration of components that would pinch or entrap the fingers or toes of a child or adult.

**1.3.16 Public spa**—any spa other than a spa which is used in connection with a single family residence and is available only to the family of the 'householder' and their private guests.

**1.3.17 Puncture hazard**—any surface or protrusion that would puncture skin under casual contact.

**1.3.18 Niche steps**—a series of vertically spaced cavities in the spa wall creating tread areas for stepholes.

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

\* Published by Australian Gas Association.

† The terms 'stile', 'side-rail', 'string', and 'stringer', are used synonymously in industry. For the purpose of this standard, the term 'stile' is used throughout.

‡ The terms 'rung', 'round', 'step', or 'tread' are used synonymously in industry. For the purpose of this standard, the term 'rung' is used throughout.