

Interim Australian Standard[®]

Amusement rides and devices

**Part 4.5: Specific requirements—
Waterborne inflatables**



This Interim Australian Standard® was prepared by Committee ME-051, Amusement Rides and Devices. It was approved on behalf of the Council of Standards Australia on 19 July 2012.

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The following are represented on Committee ME-051:

- Australian Amusement Association
 - Australian Amusement Leisure and Recreation Association
 - Consumers Federation of Australia
 - Department of Commerce, WorkSafe Division, WA
 - Department of Justice and Attorney General, Qld
 - Department of the Premier and Cabinet, SA
 - Engineers Australia
 - Kidsafe
 - University of Technology, Sydney
 - WorkCover New South Wales
 - WorkSafe Victoria
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Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Interim Standard through their representation on the Committee.

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Part 4.5: Specific requirements— Waterborne inflatables

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PREFACE

This Interim Standard was prepared by Standards Australia Committee ME-051, Amusement Rides and Devices. It was prepared to provide an Interim Standard that addressed the design and operation of waterborne inflatable (WBI) equipment and facilities.

This Standard incorporates Amendment No. 1 (April 2015). 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.

The objective of this Interim Standard is to provide designers, manufacturers, proprietors and operating staff with requirements and guidance specific to the design, construction, operation and maintenance of waterborne inflatable equipment and facilities that will protect health and safety of both operating staff and patrons of these devices.

This Interim Standard is part of a series designed to cover aspects of safety for amusement rides and devices. Parts 1 and 2 deal with the general aspects of safety common to all kinds of amusement rides and devices and are intended to be used in conjunction with the specific requirements for the particular type of ride. While some ride-specific requirements have been included in Parts 1 and 2, these are now being progressively moved into individual Standards in a new AS 3533.4 series. Parts in the AS 3533.4 series relate to particular rides or devices and give requirements and guidance tailored to the particular kinds of hazards relevant for that ride or device.

In the development of this Interim Standard, reference was made to EN 15649-1:2009. *Floating leisure articles for use on and in the water, Part 1: Classification materials, general requirements and test methods.*

Attention is drawn to the fact that this document is an Interim Australian Standard and should be regarded as a developmental Standard and liable to future alteration.

This Interim Standard will have a currency of two years from its date of publication. At the conclusion of that period it will be superseded by another Standard, confirmed as an interim Standard in its present form for a further two year period or withdrawn.

It should be noted that compliance with this Interim Standard alone does not necessarily ensure that all legal obligations are being fulfilled.

The terms 'normative' and 'informative' have been used in this Interim Standard to define the application of the appendix to which they apply. A 'normative' appendix is an integral part of a Standard, whereas an 'informative' appendix is only for information and guidance.

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FOREWORD

At present, various persons have been assigned a duty of care in the Work Health and Safety (WHS) legislation in Australia.

This Foreword indicates how these duties can generally be interpreted and may provide an understanding of the basis for the requirements in this Interim Standard.

Under WHS legislation, persons conducting a business or undertaking have a duty to ensure the safety of their workers and other people at the workplace. The operator of a waterborne inflatable (WBI) therefore has a duty to ensure that participants and others present are not exposed to risks arising from the activities. This duty includes, as far as reasonably practicable, providing a safe and healthy work environment, safe plant and structures, safe systems of work and any information, training, instruction or supervision as necessary to protect persons from the conduct of the facility and its operation.

Persons conducting a business or undertaking also have a duty to consult with workers, not just employees, who carry out work for the business or undertaking who are, or are likely to be, directly affected by a matter relating to work health or safety.

Designers, manufacturers and suppliers of plant and structures also have duties to ensure, so far as is reasonably practicable, the plant (or structure) is safe and without risk when used for a purpose for which it was designed and manufactured. Additionally they need to provide information on the purpose and any conditions necessary to ensure it is safe when used, including maintenance and repair.

There are specific requirements for installation of plant (e.g. each setup of a waterborne inflatable) to include an inspection and for identified risks to be controlled.

While this is a broad summary of the applicable legislation, readers should make themselves aware of the legislation in their jurisdiction.

Details on sealed inflatables have NOT been included in this Interim Standard.

Such information will be developed later when the final Standard is developed.

STANDARDS AUSTRALIA

Australian Standard
Amusement rides and devices

Part 4.5: Specific requirements—Waterborne inflatables

1 SCOPE

This Interim Standard specifies safety requirements and test methods related to materials, safety, performance, operation and management of constant airflow inflatable devices when used as amusement devices on controlled water. It also specifies information to be supplied with the equipment.

NOTE: The next edition of this Interim Standard is intended to also include sealed inflatable devices other than aquatic toys, e.g. blow up rings, inflated seahorses, rings intended for use on water slides, flotation aids for water familiarization.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Interim Standard:

AS

- 3533 Amusement rides and devices
- 3533.1 Part 1: Design and construction
- 3533.2 Part 2: Operation and maintenance
- 3533.3 Part 3: In-service inspection
- 4685 Playground equipment
- 4685.1 Part 1: General safety requirements and test methods
- 4878 Methods of test for coated fabrics
- 4878.6 Part 6: Determination of tensile strength and elongation at break

AS/NZS

- 4422 Playground surfacing—Specifications, requirements and test methods

ISO

- 2231 Rubber- or plastics-coated fabrics—Standard atmospheres for conditioning and testing
- 4674 Rubber- or plastics-coated fabrics—Determination of tear resistance
- 4674-1 Part 1: Constant rate of tear methods
- 15025 Protective clothing—Protection against heat and flame—Method of test for limited flame spread

BS

- 3408 Specification for tarpaulins
- 5438 Methods of test for flammability of textile fabrics when subjected to a small igniting flame applied to the face or bottom edge of vertically oriented specimens

EN

- 15649 Floating leisure articles for use on and in the water
- 15649-6 Part 6: Additional specific safety requirements and test methods for Class D devices