

AS/NZS 2845.2:2025



Australian/New Zealand Standard™

Water supply — Backflow prevention devices

Part 2: Registered air gaps and registered break tanks

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This Joint Australian/New Zealand Standard™ was prepared by Joint Technical Committee WS-023, Backflow Prevention Devices For Water Supply. It was approved on behalf of Standards Australia's Standards Development and Accreditation Committee on 11 June 2025 and by the New Zealand Standards Approval Board on 7 May 2025.

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The following are represented on Committee WS-023:

- Association of Accredited Certification Bodies
- Australian Building Codes Board
- Australian Industry Group
- Australian Plumbing Manufacturers Association
- Backflow Prevention Association of Australia
- Building Commission NSW
- Department for Energy and Mining (SA)
- Department of Housing and Public Works QLD
- Engineers Australia
- Environment and Planning Directorate (ACT)
- Master Plumbers Australia and New Zealand
- Master Plumbers, Gasfitters and Drainlayers New Zealand
- Plastics Industry Pipe Association of Australia
- Plumbing Products Industry Group
- Victorian Building Authority
- Water New Zealand
- Water Services Association of Australia

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Australian/New Zealand Standard™

Water supply — Backflow preventions devices

Part 2: Registered air gaps and registered break
tanks

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How to read this Standard

This page explains the meaning of the language and structure of this Standard.

Refer to Standards Australia's [Standardisation Guide 006](#) for more details about drafting rules.

Australian and Australian/New Zealand Standards are voluntary unless they are referenced in legislation or called up in contracts.

Requirements

To conform to a Standard, all requirements in the Standard need to be met.

A requirement is any statement in the Standard which uses the word "shall".

Recommendations, permissions and possibilities

The following words are commonly used in Standards, but statements using them do not have to be followed to conform to the Standard:

- (a) "should" means that something is recommended.
- (b) "may" means that something is permitted.
- (c) "can" means that something is possible.

Structure of Standards

A Standard always has the following parts:

- (i) The Preface states who developed the Standard, what the Standard is aiming to do, and how it relates to other documents.
- (ii) The Scope states what the Standard is about, what it covers and what it does not cover.
- (iii) The Normative references clause lists other documents that are referenced in the Standard as part of requirements.
- (iv) The Terms and definitions clause defines important terms to help with understanding the Standard.

A Standard may also include other parts, such as the following:

- (1) A normative appendix sets additional requirements that need to be conformed to.
- (2) An informative appendix provides additional information or guidance. An informative appendix provides additional information or guidance. They usually do not contain requirements. If an informative appendix does contain requirements, the Standard will specify when those requirements apply.
- (3) A Bibliography lists documents referenced in the Standard but not as part of requirements.

Many Standards include notes. Notes provide recommendations and/or guidance only. They never contain requirements.

Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee WS-023, Backflow Prevention Devices for Water Supply, to supersede AS 2845.2:2010, *Water supply—Backflow prevention devices, Part 2: Registered air gaps and registered break tanks*.

The objective of this document is to specify design and marking requirements for registered break tanks and air gaps used as backflow prevention devices for the protection of water distribution systems.

This document is designed to provide protection of water distribution systems from contamination. It should be read in conjunction with AS/NZS 2845.1, *Water supply — Backflow prevention devices, Part 1: Materials, design and performance requirements* and AS/NZS 3500.1, *Plumbing and drainage, Part 1: Water services*.

This document has been revised to meet requirements in AS/NZS 3500.1, *Plumbing and Drainage, Part 1: Water services*. Air gaps and break tanks should be recorded on a register of backflow protection devices by the local authority.

The terms “normative” and “informative” are used in Standards to define the application of the appendices 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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Introduction

Local variations for testing and maintenance may apply and therefore should conform to the relevant regulatory authority's requirements where requested. In particular, testable backflow prevention devices may be registered with the local authority and their testing and maintenance requirements observed.

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NOTES

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Australian/New Zealand Standard™

Water supply — Backflow preventions devices

Part 2: Registered air gaps and registered break tanks

1 Scope

This document specifies requirements for registered air gaps, including those incorporated in break tanks used as backflow prevention devices for the protection of water supplies.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document.

NOTE Documents referenced for informative purposes are listed in the Bibliography.

AS/NZS 3500.0, *Plumbing and drainage, Part 0: Glossary of terms*

AS/NZS 3500.1, *Plumbing and drainage, Part 1: Water services*

3 Terms and definitions

For the purposes of this document, the definitions given in AS/NZS 3500.0 and the following apply.

3.1

air gap — water supply system

unobstructed vertical distance through the free atmosphere between the lowest opening of a water service pipe or fixed outlet supplying water to a fixture or receptacle and the highest possible water level of such fixture or receptacle

3.2

break tank

storage cistern or tank incorporating an air gap, specifically designed for the purpose of backflow prevention

3.3

may

indicates the existence of an option

3.4

register

record or means by which a record of information is recorded in a list or database for the purpose of testing

3.5

shall

indicates that a statement is mandatory

3.6

should

indicates a recommendation