

Australian/New Zealand Standard™

**Water supply — Backflow
prevention devices**

**Part 3: Field testing and maintenance of
testable devices**



AS/NZS 2845.3:2020

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 the Council of Standards Australia on 28 January 2020 and by the New Zealand Standards Approval Board on 4 December 2019.

This Standard was published on 14 February 2020.

The following are represented on Committee WS-023:

- Australian Building Codes Board
- Australian Chamber of Commerce and Industry
- Australian Industry Group
- Backflow Prevention Association of Australia
- Department for Manufacturing, Innovation, Trade, Resources and Energy, SA
- Environment and Planning Directorate, ACT
- Master Plumbers Australia
- Master Plumbers, Gasfitters and Drainlayers New Zealand
- NSW Fair Trading
- Plastics Industry Pipe Association of Australia
- Plumbing Products Industry Group
- Queensland Brassware Association
- Victorian Building Authority
- Water New Zealand
- Water Services Association of Australia

This Standard was issued in draft form for comment as DR AS/NZS 2845.3:2018.

Keeping Standards up-to-date

Ensure you have the latest versions of our publications and keep up-to-date about Amendments, Rulings, Withdrawals, and new projects by visiting:

www.standards.org.au

www.standards.govt.nz

ISBN 978 1 76072 727 7

Australian/New Zealand Standard™

**Water supply — Backflow
prevention devices**

**Part 3: Field testing and maintenance of
testable devices**

First published as AS 2845.3—1993.
Previous edition 2010.
Revised and redesignated as AS/NZS 2845.3:2020.

COPYRIGHT

© Standards Australia Limited/the Crown in right of New Zealand, administered by the New Zealand Standards Executive 2020

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, unless otherwise permitted under the Copyright Act 1968 (Cth) or the Copyright Act 1994 (New Zealand).

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 2845.3—2010.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand developed this Standard as a joint Australia/New Zealand Standard.

The objective of this Standard is to outline minimum requirements for the testing and maintenance of testable backflow prevention devices in the field.

This Standard is to be read in conjunction with the requirements of the relevant regulatory authority, and the manufacturer's instructions. The safety practices to be followed while performing field testing and maintenance work should comply with the applicable WH&S legislation and the relevant regulatory authority's procedures. The actions stipulated within this Standard are in addition to those requirements.

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.

Contents

Preface	ii
Section 1 Scope and general	1
1.1 Scope	1
1.2 Application	1
1.3 Normative references	1
1.4 Terms and definitions	2
Section 2 Field testing and maintenance	2
2.1 Field testing	2
2.2 Test report	3
2.2.1 General	3
2.2.2 Copies of test reports	4
2.3 Acceptance criteria	4
2.4 Field maintenance	5
2.5 Workplace Health and Safety (WHS) requirements	5
Appendix A (normative) Field testing of registered air gaps and registered break tanks	6
Appendix B (informative) Test kit arrangement for mechanical backflow prevention devices	7
Appendix C (normative) Field testing of pressure-type vacuum-breaker backflow prevention device	8
Appendix D (normative) Spill resistant pressure vacuum-breaker	11
Appendix E (normative) Field testing of reduced-pressure-zone backflow prevention device	13
Appendix F (normative) Field testing of double check valve backflow prevention device	16
Appendix G (normative) Field testing of reduced-pressure-detector assembly backflow prevention device	19
Appendix H (normative) Field testing of double check detector assembly backflow prevention device	25
Appendix I (normative) Field testing of single check valve (testable) backflow prevention device	30
Appendix J (normative) Field testing of single check valve detector assembly testable backflow prevention devices	33
Appendix K (normative) Field testing of atmospheric vacuum breaker backflow prevention devices	36
Appendix L (informative) Example of format for reporting test results for registered air gaps and registered break tanks	38
Appendix M (informative) Example of format for reporting inspection and maintenance for backflow prevention devices	39

Australian/New Zealand Standard

Water supply — Backflow prevention devices

Part 3: Field testing and maintenance of testable devices

Section 1 Scope and general

1.1 Scope

This Standard specifies requirements for field testing and maintenance of the following backflow prevention devices:

- (a) Registered break tank (RBT).
- (b) Registered air gap (RAG).
- (c) Pressure-type vacuum-breaker (PVB).
- (d) Spill resistant pressure vacuum-breaker (SPVB).
- (e) Reduce-pressure-zone device (RPZD).
- (f) Double check valve (DCV).
- (g) Reduced-pressure-detector assembly (RPDA).
- (h) Double check detector assembly (DCDA).
- (i) Single check valve (testable) (SCVT).
- (j) Single check detector assembly (testable) (SCDAT).
- (k) Atmospheric vacuum breakers (AVB).

NOTE Single check valve and single check detector assembly [Items (i) and (j)] do not apply to New Zealand).

1.2 Application

This Standard shall be read in conjunction with the manufacturer's instructions. The relevant legislation applies.

NOTE 1 Testable devices should only be used where there is a maintenance program for device registration and test certification.

NOTE 2 New Zealand requires backflow device installations to meet the New Zealand Building Code G12 and hazard identification requirements, regardless of any property compliance schedule set in place, or property type.

1.3 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:

AS/NZS 2845.1, *Water supply—Backflow prevention devices, Part 1: Materials, design and performance requirements*

AS 2845.2, *Water supply—Backflow preventions devices, Part 2: Registered air gaps and registered break tanks*

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

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