AS 4032.2—2005
(Incorporating Amendment Nos 1 and 2)

Australian Standard®

Water supply—Valves for the control of hot water supply temperatures

Part 2: Tempering valves and end-of-line temperature-actuated devices

This Australian Standard® was prepared by Committee WS-026, Valves Primarily for Use in Warm and Hot Water Systems. It was approved on behalf of the Council of Standards Australia on 22 August 2005.
This Standard was published on 13 December 2005.

The following are represented on Committee WS-026:

- AUSTAP
- Australian Industry Group
- Building Officials Institute of New Zealand
- Business New Zealand
- Consumers' Federation of Australia
- Department of Health (South Australia)
- Gas Appliance Manufacturers Association of Australia
- Institute of Hospital Engineering Australia
- Master Plumbers and Mechanical Services Association of Australia
- Master Plumbers Association of NSW
- Master Plumbers, Gasfitters and Drainlayers New Zealand
- New Zealand Employers and Manufacturers Association
- NSW Health Department
- Water Corporation Western Australia

This Standard was issued in draft form for comment as DR 05294.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

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Water supply—Valves for the control of hot water supply temperatures

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Originated as AS 4032.2—2002.
Second Edition 2005.
Reissued incorporating Amendment No. 1 (October 2006).
Reissued incorporating Amendment No. 2 (June 2009).

Published by Standards Australia GPO Box 476, Sydney, NSW 2001, Australia

ISBN 0 7337 7048 7

PREFACE

This Standard was prepared by the members of the Joint Standards Australia/Standards New Zealand Committee WS-026, Valves Primarily for Use in Warm and Hot Water Systems.

This Standard incorporates Amendment No. 1 (October 2006) and Amendment No. 2 (June 2009). 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.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this Standard is to provide manufacturers with requirements for tempering valves and end-of-line temperature-actuated devices that give reasonable protection to users against exposure to high or excessive fluctuations in mixed water temperatures caused by the following:

(a) Maintaining an outlet temperature within specified limits, including shut-off of the cold water supply.

(b) Closing the outlet when the mixed water temperature exceeds a specified maximum.

This Standard is Part 2 of a suite of Standards that covers valves for the control of hot water temperatures, as follows:

AS		
4032		Water supply—Valves for the control of hot water supply temperatures
4032.1	Part 1:	Thermostatic mixing valves—Materials, design and performance requirements
4032.2	Part 2:	Tempering valves and end-of-line temperature-actuated devices (this Standard)
4032.3	Part 3:	Requirements for field testing, maintenance or replacement of thermostatic mixing valves, tempering valves and end-of-line temperature control devices

The terms ‘normative’ and ‘informative’ have been used in this 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.

This Standard necessarily deals with existing conditions, but is not intended to discourage innovation or to exclude materials, equipment and methods that may be developed in the future. Revisions will be made from time to time in view of such developments, and amendments to this Edition will be made only when absolutely necessary.

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SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies requirements for the design, construction, testing and performance of—

(a) tempering valves of nominal sizes not larger than DN 32; and

A2 (b) end-of-line temperature-actuated devices of nominal size not larger than DN 25, for use with—

A2 (i) heated water at continuous operating temperature not exceeding 85°C;

(ii) heated water at temperature under emergency conditions, not exceeding 99°C; and

(iii) continuous working pressure not exceeding 1400 kPa.

Devices complying with this Standard are intended to prevent a continuous discharge of water from the outlet in excess of 50°C under steady-state conditions.

Transient discharges of water with a temperature in excess of this figure, which comply with the specified cumulative time/temperature factors, are acceptable.

NOTE: Tempering valves, when adjusted to an outlet temperature not exceeding 50°C, and end-of-line devices may be used for temperature-limiting for ablution purposes, to minimize the risk of scalding, other than for use in health care, aged care, child care, care for people with disabilities and any other at-risk situations. Thermostatic mixing valves complying with AS 4032.1, when adjusted to an outlet temperature not exceeding 45°C, are intended for use in health care, aged care, child care, care for people with disabilities and any other at-risk situations.

1.2 APPLICATION

Appendix A sets out the means by which compliance with this Standard shall be demonstrated by a manufacturer for the purpose of product certification.

1.3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS	
1167	Welding and brazing—Filler metals
1167.1	Part 1: Filler metal for brazing and braze welding
1349	Bourdon tube pressure and vacuum gauges
1432	Copper tubes for plumbing, gasfitting and drainage applications
1565	Copper and copper alloys—Ingots and castings
1567	Copper and copper alloys—Wrought rods, bars and sections