

AS 3500.4—1994

Australian Standard[®]

**National Plumbing and Drainage
Code**

Part 4: Hot water supply systems

This Australian Standard was prepared by Committee WS/14, National Plumbing and Drainage Code. It was approved on behalf of the Council of Standards Australia on 25 July 1994 and published on 19 September 1994.

The following interests are represented on Committee WS/14:

Association of Hydraulic Services Consultants Australia
AUSTAP
Australian Plumbing and Mechanical Contractors Association
Brisbane City Council
Department of Environment and Planning, Tas.
Department of Housing Local Government Planning, Qld
Department of Lands, Housing and Local Government, N.T.
Electricity Supply Association of Australia
Engineering and Water Supply Department, S.A.
Gas Appliance Manufacturers Association of Australia
Housing Industry Association
Melbourne Water
Metal Trades Industry Association of Australia
New Zealand Manufacturers Federation
New Zealand Society of Master Plumbers and Gasfitters
Plastics and Chemicals Industry Association Incorporated Australia
Public Works Department, N.S.W.
Water Authority of Western Australia
Water Board Sydney—Illawarra—Blue Mountains

Review of Australian Standards. To keep abreast of progress in industry, Australian Standards are subject to periodic review and are kept up to date by the issue of amendments or new editions as necessary. It is important therefore that Standards users ensure that they are in possession of the latest edition, and any amendments thereto.

Full details of all Australian Standards and related publications will be found in the Standards Australia Catalogue of Publications; this information is supplemented each month by the magazine 'The Australian Standard', which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.

Suggestions for improvements to Australian Standards, addressed to the head office of Standards Australia, are welcomed. Notification of any inaccuracy or ambiguity found in an Australian Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

AS 3500.4—1994

Australian Standard®

National Plumbing and Drainage Code

Part 4: Hot water supply systems

AS 3500.4 first published in part as AS CA51—1968.
Revised and redesignated AS 1529—1974.
AS 2002 first published 1979.
Second edition 1981.
Third edition 1987.
AS 1529—1974 and AS 2002—1978 revised,
amalgamated and redesignated AS 3500.4—1990.
Second edition 1994.
Incorporating:
Amdt 1—1996

PUBLISHED BY STANDARDS AUSTRALIA
(STANDARDS ASSOCIATION OF AUSTRALIA)
1 THE CRESCENT, HOMEBUSH, NSW 2140

ISBN 0 7262 9194 3

PREFACE

This Standard was prepared by the Joint Australia/New Zealand Standards Committee WS/14 on Hot Water Systems to supersede AS 3500.4—1990.

Noise levels have not been included as progress on a unified method of analysis has not been agreed upon and requires further research.

The primary purpose of this Standard is to provide a uniformity of installation practices throughout Australia and to enable the co-ordination of requirements of the various statutory bodies responsible for the installation of water heaters and hot water reticulation. Account has been taken of current regulations stipulated by water, gas and electricity supply authorities and local government bodies in Australia.

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 includes various industrial and editorial revisions according to Standards Australia requirements.

© Copyright — STANDARDS AUSTRALIA

Users of Standards are reminded that copyright subsists in all Standards Australia publications and software. Except where the Copyright Act allows and except where provided for below no publications or software produced by Standards Australia may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from Standards Australia. Permission may be conditional on an appropriate royalty payment. Requests for permission and information on commercial software royalties should be directed to the head office of Standards Australia.

Standards Australia will permit up to 10 percent of the technical content pages of a Standard to be copied for use exclusively in-house by purchasers of the Standard without payment of a royalty or advice to Standards Australia.

Standards Australia will also permit the inclusion of its copyright material in computer software programs for no royalty payment provided such programs are used exclusively in-house by the creators of the programs.

Care should be taken to ensure that material used is from the current edition of the Standard and that it is updated whenever the Standard is amended or revised. The number and date of the Standard should therefore be clearly identified.

The use of material in print form or in computer software programs to be used commercially, with or without payment, or in commercial contracts is subject to the payment of a royalty. This policy may be varied by Standards Australia at any time.

CONTENTS

	<i>Page</i>
FOREWORD	6
 SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE	7
1.2 APPLICATION	7
1.3 REFERENCED DOCUMENTS	7
1.4 DEFINITIONS	8
1.5 CLASSIFICATION OF SOILS	8
1.6 CLASSIFICATION OF BUILDINGS	8
1.7 WATER QUALITY	8
1.8 EQUIVALENT PIPE SIZES	8
1.9 FIRE RESISTANCE LEVEL (FRL)	8
1.10 WATER TEMPERATURE	8
 SECTION 2 MATERIALS AND PRODUCTS	
2.1 SCOPE OF SECTION	10
2.2 PIPES AND FITTINGS	10
2.3 CISTERN (COLD WATER STORAGE TANK) MATERIALS	11
2.4 SAFE TRAY AND SAFE WASTES MATERIALS	11
2.5 JOINTING PRODUCTS	11
2.6 BEDDING MATERIAL	12
2.7 BACKFILL MATERIAL	12
2.8 MISCELLANEOUS MATERIALS	12
 SECTION 3 INSTALLATION OF COLD AND HOT WATER PIPEWORK AND CONTROLS	
3.1 SCOPE OF SECTION	13
3.2 SAFETY PRECAUTIONS	13
3.3 GENERAL REQUIREMENTS	13
3.4 PROTECTION AGAINST FREEZING	17
3.5 COLD WATER CONTROLS AND PIPING	18
3.6 INSTALLATION OF HOT WATER SUPPLY	21
3.7 THERMOSTATIC MIXING VALVES	24
 SECTION 4 INSTALLATION OF WATER HEATERS OTHER THAN SOLAR HEATERS	
4.1 SCOPE OF SECTION	27
4.2 WATER HEATERS	27
4.3 LOCATION	27
4.4 PROTECTION AGAINST DAMAGE FROM LEAKING WATER	27
4.5 SUPPORT	28
4.6 CORROSION PREVENTION AND WEATHER PROTECTION	29
4.7 CONNECTIONS TO WATER HEATERS	30
4.8 PRESSURE RELIEF AND VENTING OF WATER HEATERS AND CONTAINERS	30

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- Looking for additional Standards? Visit Intertek Inform Infostore
 - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-