

Australian/New Zealand Standard™

**Plumbing and drainage**

**Part 3: Stormwater drainage**



### **AS/NZS 3500.3:2003**

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee WS-014, Plumbing and drainage. It was approved on behalf of the Council of Standards Australia on 10 November 2003 and on behalf of the Council of Standards New Zealand on 19 November 2003.

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# Australian/New Zealand Standard™

## Plumbing and drainage

### Part 3: Stormwater drainage

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## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee WS-020, Stormwater, to supersede AS/NZS 3500.3.2—1998, *National Plumbing and Drainage*, Part 3.2: *Stormwater drainage—Acceptable solution*.

*This Standard incorporates Amendment No. 1 (July 2006) and Amendment No. 2 (March 2010) and Amendment No. 3 (June 2012). 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 Standard is to provide installers with solutions to comply with—

- (a) the Plumbing Code of Australia (PCA);
- (b) the Building Code of Australia (BCA); and
- (c) the Building Code of New Zealand for stormwater drainage.

This Standard is part of a series for plumbing and drainage, as follows:

### AS/NZS

- 3500 Plumbing and drainage
- 3500.0 Part 0: Glossary of terms
- 3500.1 Part 1: Water services.
- 3500.2 Part 2: Sanitary plumbing and drainage systems
- 3500.3 Part 3: Stormwater drainage systems (this Standard)
- 3500.4 Part 4: Heated water services.
- 3500.5 Part 5: Domestic installations

This revision includes the following changes:

- (i) Changes in the context to enable this Standard to be referenced in the above listed Codes.
- (ii) The inclusion of revised clauses to bring them into line with the provisions of the Plumbing Code of Australia.
- (ii) Revision of the materials and products used in stormwater drainage systems.
- (iii) Incorporation of Amendment 1 and RUL PL.13—2002.
- (iv) Revised examples in Appendix H.

Other changes incorporate amendments and additions arising from industry recommendations which include—

- (a) changes in limitations in FRC pipes and epoxy resins; and
- (b) clarification of examples for design of eaves gutters of slope less than 1:500.

This Standard does not cover the criteria for soakers and siphonic systems. Sufficient data was not available in these areas at the time of publication. These areas will be included in a future edition of this Standard, subject to additional research and investigation being carried out.

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.

Statements expressed in mandatory terms in notes to figures and tables are deemed to be requirements of this Standard.

**PROVISION FOR REVISION**

This Standard necessarily deals with existing conditions, but is not intended to discourage innovation or to exclude materials, equipment and methods, which may be developed in 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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# STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

## Australian/New Zealand Standard Plumbing and drainage

### Part 3: Stormwater drainage

## SECTION 1 SCOPE AND GENERAL

### 1.1 SCOPE AND APPLICATION

#### 1.1.1 Scope

This Standard covers materials, design, installation and testing of roof drainage systems, surface drainage systems and subsoil drainage systems to a point of connection.

#### 1.1.2 Application

##### 1.1.2.1 *Building Code of Australia*

This Standard may be used as a means of demonstrating compliance with the requirements of Part F1 of Volume One and Parts 3.1.2 and 3.5.2 of the Housing Provisions of the Building Code of Australia.

This Standard will be referenced in the Building Code of Australia by way of BCA Amendment 14 to be published by 1 May 2004.

##### 1.1.2.2 *Plumbing Code of Australia*

This Standard will be referenced in the Plumbing Code of Australia.

### 1.2 REFERENCED DOCUMENTS

The documents referred to in this Standard are listed in Appendix A.

NOTE: A list of related documents is given in Paragraph A2, Appendix A

### 1.3 DEFINITIONS

#### 1.3.1 General

For the purpose of this Standard, the definitions in AS/NZS 3500.0 and those below apply. The definitions listed below specifically apply to this Standard.

#### 1.3.2 Average recurrence interval (ARI)

The average or expected interval between events of a given rainfall intensity being exceeded.

NOTE: The ARI is an average value based on statistical analysis. The actual time between exceedances will vary.

#### 1.3.3 Box gutter

Graded channel, generally of rectangular shape, for the conveyance of rainwater, located within the building. Includes a gutter adjacent to a wall or parapet (see Figures I5, I7).

#### 1.3.4 External stormwater drainage network

A system that collects and conveys stormwater from individual properties.

NOTE: The network includes easement or inter-allotment drains, and street and trunk drainage systems.