

AS/NZS 3500.3:2021



Australian/New Zealand Standard™

Plumbing and drainage

Part 3: Stormwater drainage



AS/NZS 3500.3:2021

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- Association of Hydraulic Services Consultants Australia
- Australian Building Codes Board
- Australian Industry Group
- Australian Stainless Steel Development Association
- Backflow Prevention Association of Australia
- Engineers Australia
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- Plumbing Distributors Association of New Zealand
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Preface

This document was prepared by the joint Standards Australia/Standards New Zealand Committee WS-014, Plumbing and Drainage, to supersede AS/NZS 3500.3:2018.

The objective of this document is to provide stormwater drainage solutions for compliance with —

- (a) the National Construction Code (NCC); and
- (b) the New Zealand Building Code (NZBC), Clause E1 Surface Water.

A list of all parts in the AS/NZS 3500 series for plumbing and drainage can be found in the Standards Australia and Standards New Zealand online catalogues.

The major changes in this revision are as follows:

- (i) Definitions have been relocated to AS/NZS 3500.0 for consistency across the series.
- (ii) Design rainfall intensities are now expressed in terms of the Annual Exceedance Probability (AEP) values to reflect the practice of the Australian Bureau of Meteorology (BOM) and the performance requirements of NZBC Clause E1 Surface Water. There has been no change in the requirements or the calculations, and the original ARI values are shown for comparison.
- (iii) The 5 min duration rainfall intensities for representative places in Australia given in [Table D.1](#) have been updated to show the latest values from the BOM.
- (iv) The New Zealand rainfall maps have been replaced by [Table E.1](#) showing 10 % AEP (10 years ARI) and 2 % AEP (50 years ARI) rainfall intensities for selected locations.
- (v) The range of materials that can be used for wet wells has been expanded to encompass prefabricated wells.
- (vi) Changes have been made to the requirements for the marking of pipes in commercial buildings to assist in the better identification of pipework and avoiding cross connections.
- (vii) The design rainfall intensities for balcony and terrace drainage systems in New Zealand have been included.

The terms “normative” and “informative” are used in documents to define the application of the appendices to which they apply. A “normative” appendix is an integral part of a document, whereas an “informative” appendix is only for information and guidance.

Notes or footnotes to tables or figures that are expressed in mandatory terms are deemed to be requirements of this document.

Notes to clauses in this document are informative only and do not include requirements.

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NOTES

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Section 1 Scope and general

1.1 Scope

This document sets out the requirements for materials, design, installation and testing of roof drainage systems, surface drainage systems and subsoil drainage systems to a point of connection.

Illustrations used in this Standard are diagrammatic only and have been chosen without prejudice.

NOTE [Appendix M](#) provides general information to users of the document.

1.2 Application

1.2.1 Australia

This document shall be read in conjunction with the National Construction Code (NCC).

Where alternative Australian or New Zealand Standards are referenced (e.g. AS 1345), the Australian Standard shall be used for Australia only.

1.2.2 New Zealand

This document shall be read in conjunction with the New Zealand Building Code (NZBC). This document may be used to demonstrate compliance with the NZBC Clause E1 Surface Water.

Where alternative New Zealand Standards are referenced (e.g. NZS 5807), the New Zealand Standard shall be used for New Zealand only.

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.

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

AS 1074, *Steel tubes and tubulars for ordinary service*

AS 1273, *Unplasticized PVC (UPVC) downpipe and fittings for rainwater*

AS 1289.5.4.1, *Methods of testing soils for engineering purposes, Method 5.4.1: Soil compaction and density tests — Compaction control test — Dry density ratio, moisture variation and moisture ratio*

AS 1289.5.6.1, *Methods of testing soils for engineering purposes, Part 5.6.1: Soil compaction and density tests — Compaction control test — Density index method for a cohesionless material*

AS 1379, *Specification and supply of concrete*

AS 1432, *Copper tubes for plumbing, gasfitting and drainage applications*

AS 1478.1, *Chemical admixtures for concrete, mortar and grout, Part 1: Admixtures for concrete*

AS 1604.1, *Specification for preservative treatment, Part 1: Sawn and round timber*

AS 1628, *Water supply — Metallic gate globe and non-return valves*