

Australian Standard<sup>®</sup>

**Waterproofing membrane systems for  
exterior use—Above ground level**

**Part 2: Design and installation**

**STANDARDS**  
Australia



This Australian Standard® was prepared by Committee BD-013, External Waterproofing Membranes. It was approved on behalf of the Council of Standards Australia on 14 May 2009.

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The following are represented on Committee BD-013:

- Australian Building Codes Board
  - Australian Chamber of Commerce and Industry
  - Australian Society of Building Consultants
  - Australian Institute of Building
  - Australian Institute of Waterproofing
  - Australian Tile Council
  - CSIRO Manufacturing and Infrastructure Technology
  - Housing Industry Association
  - Master Builders Australia
  - Plastics and Chemical Industries Association
  - South Australian Housing Trust
- 

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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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## PREFACE

This Standard was prepared by the Standards Australia Committee BD-013, External Waterproofing Membranes to supersede (in part) AS CA55—1970, *Code of recommended practice for the design and installation of bituminous fabric roofing*.

This Standard has been prepared in response to numerous requests from industry representatives in the field of external waterproofing, especially in the areas of roofs, decks and balconies.

The objective of this Standard is to provide a consistent and reliable approach to the design and installation of external waterproofing membrane systems.

This Standard is Part 2 of a series of Standards on external waterproofing, as follows:

AS

4654 Waterproofing membrane systems for exterior use—Above ground level

4654.1 Part 1: Materials

4654.2 Part 2: Design and installation (this Standard)

Figures throughout this Standard indicate the membrane system as a heavy dashed layer line. The system may comprise a single layer or multiple layers.

The term 'informative' has been used in this Standard to define the application of the appendix to which it applies. An 'informative' appendix is only for information and guidance.

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## STANDARDS AUSTRALIA

## Australian Standard

## Waterproofing membrane systems for exterior use—Above ground level

## Part 2: Design and installation

## SECTION 1 SCOPE AND GENERAL

**1.1 SCOPE**

This Standard sets out the performance criteria and provides deemed-to-comply solutions for the design and installation of external waterproofing membrane systems for all buildings, including planter boxes and landscaped areas, that can affect the waterproof integrity of the building or cause deterioration and damage to adjoining finishes or structural elements.

Where the waterproofing system is likely to be in contact to root systems of vegetation, it shall be root resistant.

This Standard is not intended for use in applications such as swimming pools and spas and excludes concrete admixtures or penetrant sealers or finishes and decorative coatings.

In addition to providing performance criteria and design considerations, examples of deemed-to-comply design and installation solutions are given. These do not include options for concrete admixtures, penetrant sealers or decorative coatings.

NOTE: Where specific details and installation techniques are not covered by this Standard, manufacturer's instructions should be followed.

**1.2 APPLICATION**

This Standard applies to all parts of Australia, and it is intended for use by designers, manufacturers, specifiers and installers of external waterproofing membrane systems. It may also be used as a reference for new and remedial building work.

**1.3 NEW SYSTEMS AND MATERIALS**

This Standard shall not be interpreted as preventing the use of materials that meet the criteria set out in the Standard, by independent testing.

**1.4 NORMATIVE REFERENCES**

The following documents are indispensable to the application of this Standard:

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

AS

4055 Wind loads for housing

4654 Waterproofing membrane systems for exterior use

4654.1 Part 1: Materials

AS/NZS

1170 Minimum design loads on structures

1170.2 Part 2: Wind loads