AS/NZS 4859.1:2018 (Incorporating Amendment No. 1)





Australian/New Zealand Standard™

Thermal insulation materials for buildings

Part 1: General criteria and technical provisions



AS/NZS 4859.1:2018

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee BD-058, Thermal Insulation. It was approved on behalf of the Council of Standards Australia on 8 October 2018 and by the New Zealand Standards Approval Board on 6 November 2018. Reissued incorporating Amendment No 1 (August 2024).

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The following are represented on Committee BD-058:

Aluminium Foil Insulation Association

Australian Building Codes Board

Australian Cellulose Insulation Manufacturers Association

Australian Institute of Refrigeration Air Conditioning and Heating

Australian Professional Thermography Association

AWTA Product Testing

Building Research Association of New Zealand

Consumers Federation of Australia

CSIRO

Engineers Australia

Housing Industry Association

Insulation Association of New Zealand

Insulation Australasia

Insulation Council of Australia and New Zealand

Master Builders Australia

Master Plumbers Australia

National Electrical and Communications Association

New Zealand Metal Roofing Manufacturers

Pliable Membranes Association of Australia and New Zealand

Roofing Association of New Zealand

Roofing Tile Association of Australia

Thermal Insulation Contractors Association of Australia, NSW

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Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee BD-058, Thermal Insulation, to supersede, AS/NZS 4859.1:2002, *Materials for the thermal insulation of buildings*, Part 1: *General criteria and technical provisions*.

h This Standard incorporates Amendment No. 1 (August 2024). The start and end of changes introduced by the Amendment are indicated in the text by tags including the Amendment number 1.

Amendment No. 1 to this Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee BD-058, Thermal Insulation.

The objective of this revision is to restructure the Standard as a material properties and test methods Standard and include latest thermal insulation products testing not previously covered by the Standard.

The significant changes in this edition are as follows:

- (a) The relocation of all thermal insulation system design to a separate Part of this series (i.e. AS/NZS 4859.2).
- (b) The deletion of the references to the AS 1366 suite of Standards.
- (c) The inclusion of a wider range of thermal insulation materials and, in particular, rigid foam products.

Emphasis has been given to the development of clear and concise requirements for determination and labelling of thermal performance, a primary performance requirement for these materials. Another consideration is the effect of ageing of materials where there is a significant change in the insulation properties of those materials over time.

In this Standard, notes to the main text are for information and guidance only.

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.

If alternative tests to those prescribed in this Standard are to be used, they would need to be considered as part of the development of a Performance Solution to demonstrate compliance with the relevant Performance Requirements of the National Construction Code (NCC) and be accepted by the relevant building authority.

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