

AS/NZS 4859.1:2002  
(Incorporating Amendment No. 1)

AS/NZS 4859.1:2002

Australian/New Zealand Standard™

## **Materials for the thermal insulation of buildings**

### **Part 1: General criteria and technical provisions**



## **AS/NZS 4859.1:2002**

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee BD-058, Thermal performance and insulation of dwellings. It was approved on behalf of the Council of Standards Australia on 28 August 2002 and on behalf of the Council of Standards New Zealand on 20 August 2002. This Standard was published on 15 October 2002.

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The following are represented on Committee BD-058:

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Association of Consulting Engineers Australia  
Australian Building Codes Board  
Australian Cellulose Insulation Manufacturers Association  
Australian Glass and Glazing Association  
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Originated in Australia as part of AS 2352—1980, AS 2461—1981, AS 2462—1981, AS 2463—1981, AS 2464.1—1981, AS 2464.2—1981, AS 2464.3—1983, AS 2464.4—1981, AS 2464.5—1985, AS 2464.6—1983, AS 2464.7—1990 and AS 3742—1990

Originated in New Zealand as NZS 1340—1959.

Previous edition NZS 4222—1992

AS 2352—1980, AS 2461—1981, AS 2462—1981, AS 2463—1981, AS 2464.1—1981, AS 2464.2—1981, AS 2464.3—1983, AS 2464.4—1981, AS 2464.5—1985, AS 2464.6—1983, AS 2464.7—1990 and AS 3742—1990 and NZS 4222—1992 jointly revised, amalgamated and redesignated as AS/NZS 4859.1—2002.

Reissued incorporating Amendment No. 1 (December 2006).

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Jointly published by Standards Australia, GPO Box 476, Sydney, NSW 2001 and Standards New Zealand, Private Bag 2439, Wellington 6020

ISBN 0 7337 4840 6

## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee BD-058, Thermal Performance and Insulation of Dwellings, to supersede the following standards:

### AS

2352—1980	Glossary of terms for thermal insulation of buildings
2461—1981	Mineral wool thermal insulation—Loose fill
2462—1981	Cellulosic fibre thermal insulation
2463—1981	Sea grass bulk thermal insulation
2464.1—1981	Methods of testing thermal insulation, Part 1: Corrosiveness of thermal insulation
2464.2—1981	Methods of testing thermal insulation, Part 2: Bulk density of blown fibrous loose-fill thermal insulation
2464.3—1983	Methods of testing thermal insulation, Part 3: Thermal resistance of low-density fibrous loose-fill thermal insulation
2464.4—1981	Methods of testing thermal insulation, Part 4: Length, width and thickness of batt or blanket type thermal insulation
2464.5—1985	Methods of testing thermal insulation, Part 5: Steady-state thermal transmission properties by means of the heat flow meter
2464.6—1983	Methods of testing thermal insulation, Part 6: Steady-state thermal transmission properties by means of the guarded hotplate
2464.7—1990	Methods of testing thermal insulation, Part 7: Determination of the average thermal resistance of low-density mineral wool thermal insulation—Batt and blanket
3742—1990	Mineral wool thermal insulation—Batt and blanket

### NZS

4222:1992	Materials for the thermal insulation of buildings
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*This Standard incorporates Amendment No. 1 (December 2006). 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 address the standardization and performance verification requirements of all thermal insulation materials that may be used in buildings. Insulation materials or assemblies are broadly classified into groups, having different testing requirements over a number of aspects of performance. These classifications may be applied to all unspecified products and materials according to definable characteristics. This Standard also provides specific requirements for individual types of insulation materials.

Particular 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 durability.

Standards Australia draws attention to the fact that this is not an installation Standard. Installation requirements can be obtained from other sources, including AS 3999. The sections of this Standard that relate to individual types of insulation materials may make some reference to installation matters where these are closely linked to the specification and performance requirements of the material or assembly.

This Standard does not deal with performance requirements for systems or materials that have some primary function other than providing thermal insulation. Where some other primary purpose is to be served by the material or system (e.g., sarking, structural panels etc.) compliance with this Standard alone shall not be seen as sufficient. In those cases reference to other appropriate Standards shall be made.

In this Standard, notes are for information and guidance only and compliance with them is not a requirement of the Standard.

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

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.

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