



# **Pliable building membranes and underlays**

## **Part 1: Materials**



This Australian Standard® was prepared by Committee BD-058, Thermal Insulation. It was approved on behalf of the Council of Standards Australia on 7 October 2016. This Standard was published on 2 May 2017.

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  - Australian Building Codes Board
  - Australian Cellulose Insulation Manufacturers Association
  - Australian Professional Thermography Association
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  - Pliable Membranes Association of Australia and New Zealand
  - Polyester Insulation Manufacturers Association
  - Recessed Luminaire Enclosure Association of Australia
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This Standard was issued in draft form for comment as DR AS/NZS 4200.1:2015.

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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Australian Standard®

## **Pliable building membranes and underlays**

### **Part 1: Materials**

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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 4200.1:1994.

*This Standard incorporates Amendment No. 1 (June 2021). 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 a means of testing and evaluating pliable building membrane materials for various applications within a building structure.

A1

Amendment No. 1 to this document was prepared by the Australian members of Joint Standards Australia/Standards New Zealand Committee BD-058, Thermal Insulation. As a consequence of Amendment No. 1, which is published as an Australian-only amendment, the designation of this document has been changed from AS/NZS 4200.1:2017 to AS 4200.1:2017.

The objective of this revision is to provide broader material classifications for pliable building membranes to assist users in making informed decisions on how to select the right material for the chosen application, including classification of electrical conductivity.

It is acknowledged that further research is required to better define the Duty Classifications for all material types in common use. When this work is completed the Duty Classifications will be reviewed and if justified, proposed for revision in a future amendment to this Standard. This revision also includes optional tests for material properties that determine long-term durability which will generate market data able to be used within the next revision.

This Standard is intended to be read in conjunction with AS 4200.2, *Pliable building membranes, Part 2: Installation requirements*.

The term ‘normative’ has been used in this Standard to define the application of the appendix to which it applies. A ‘normative’ appendix is an integral part of a Standard.

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## STANDARDS AUSTRALIA STANDARDS AUSTRALIA

**Australian Standard****Pliable building membranes and underlays****Part 1: Materials****1 SCOPE**

This Standard sets out requirements for materials for use as pliable building membranes (also known as ‘sarking’ or ‘underlay’), when used either independently or as a facing to other materials, such as insulation materials, for any one or more of the following control functions:

- (a) Water control.
- (b) Thermal control.
- (c) Vapour control.
- (d) Air control.

This Standard does not cover requirements for materials used in the following applications:

- (i) Air-handling ducts and building services.
- (ii) Under concrete slabs on-ground.
- (iii) Waterproofing above flat concrete roofs.

NOTE: Thermal performance of reflective insulation pliable building membranes and faced building blankets is specified in AS/NZS 4859.1.

**2 APPLICATION**

This Standard is intended for use in the assessment and classification of pliable building membrane materials.

**3 NORMATIVE REFERENCES**

The following are the normative documents referenced in this Standard:

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

## AS

1301	Methods of test for pulp and paper
1301.423	Folding endurance of paper—Kohler-Molin methods
1301.448s	Tensile strength of paper or paperboard (constant rate of elongation method)
1530	Methods for fire tests on building materials, components and structures
1530.2	Method 2: Test for flammability of materials
2001	Methods of test for textiles
2001.2	Method 2: Physical tests
2001.2.19	Method 19: Determination of bursting force of textile fabrics—Ball burst method
3706	Geotextiles—Methods of test
3706.4	Method 4: Determination of burst strength—California bearing ratio (CBR)—Plunger method