

Australian/New Zealand Standard™

**Domestic solid fuel burning  
appliances—Method for determination  
of power output and efficiency**



## **AS/NZS 4012:2014**

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee CS-062, Solid Fuel Burning Appliances. It was approved on behalf of the Council of Standards Australia on 1 April 2014 and on behalf of the Council of Standards New Zealand on 25 July 2014.

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The following are represented on Committee CS-062:

Australasian Fire and Emergency Service Authorities Council  
Australian Building Codes Board  
Australian Chamber of Commerce and Industry  
Australian Home Heating Association  
Australian Industry Group  
Bioenergy Association of New Zealand  
Clean Air Society of Australia and New Zealand  
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*This Standard was issued in draft form for comment as DR AS/NZS 4012.*

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## Australian/New Zealand Standard™

# Domestic solid fuel burning appliances—Method for determination of power output and efficiency

First published in Australia as AS 4012—1992.  
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## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee CS-062, Solid Fuel Burning Appliances, to supersede AS/NZS 4012:1999.

*This Standard incorporates Amendment No. 1 (April 2015). 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 Standard sets out sufficiently comprehensive specifications and instructions to enable all interested organizations with appropriate test facilities to determine the power output and efficiency of solid fuel burning appliances.

It is intended that the results of testing to this method will be of use to consumers during selection of solid fuel burning appliances.

This revision of the Standard incorporates a change to the labelling requirements for test results.

In this edition, the following changes have occurred:

- (a) Changes to the use of fans during testing (Clause 6.7.3).
- (b) Measurement of heat collected for hot water has been included in efficiency measurement.
- (c) A method for measuring heat collected by water heating facilities has been included as an appendix.
- (d) Minimum efficiency requirements have been included.
- (e) In Australia, appliances previously exempt from testing because heat output rates exceeded 25kW will now be tested with smaller fuel loads.

The relevant regulators have indicated that they will mandate the levels of appliances in Clause 9.1.1(a) one year from publication of this Standard. The relevant regulators have indicated that they will mandate the levels of appliances in Clause 9.1.1(b) five years from publication of this Standard.

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/STANDARDS NEW ZEALAND

**Australian/New Zealand Standard****Domestic solid fuel burning appliances—Method for determination of power output and efficiency**

## SECTION 1 SCOPE AND GENERAL

**1.1 SCOPE**

This Standard sets out a method for the determination of the average efficiency and average thermal power output from a batch-fed domestic solid fuel burning appliance and the associated efficiency acceptance criteria/ion.

**1.2 APPLICATION****1.2.1 General**

This Standard applies to domestic solid fuel burning appliances.

**1.2.2 Included appliances**

Appliances within the scope of this Standard include—

- (a) space-heating appliances; and
- (b) space-heating appliances that include water-heating devices.

**1.2.3 Excluded appliances**

Appliances excluded from this Standard are—

- (a) site-built masonry appliances;
- (b) central heating appliances;
- (c) cooking appliances;
- (d) appliances intended solely for water heating;
- (e) appliances intended solely to distribute convective heat via ducting to locations remote from the appliance; and
- (f) appliances that, when fired at the high burn rate [see Clause 6.3(a)] prescribed in this Standard, have a maximum carbon dioxide output from the combustion chamber of less than 5% by volume with any optional doors fitted and closed.

**1.3 REFERENCED DOCUMENTS**

The following documents are referred to in this Standard:

AS	
2918	Domestic solid fuel burning appliances—Installation
AS/NZS	
3869	Domestic solid fuel burning appliances—Design and construction
4013	Domestic solid fuel burning appliances—Method for determination of flue gas emission
4014	Domestic solid fuel burning appliances—Test fuels (series)