

Australian/New Zealand Standard™

Fire hazard testing—

**Part 2.12: Glowing/hot wire based test
methods—Glow-wire flammability test
method for materials
(IEC 60695-2-12:2000, IDT)**



Standards Australia



STANDARDS
NEW ZEALAND
Te Kaitiaki Takekōwhiri

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The following interests are represented on Committee EL-002:

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Australian Chamber of Commerce and Industry
Australian Electrical and Electronic Manufacturers Association
Canterbury Manufacturers Association New Zealand
Consumer Electronic Suppliers Association, Australia
Electrical regulatory authorities, Australia
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AS/NZS 60695.2.12:2001

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PREFACE

This standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-002- Safety of Household and Similar Electrical Appliances and Small Power Transformers, to supersede the general glow-wire test methods contained in AS/NZS 4695.2.12, two years from publication.

The objective of this Standard is to provide a small-scale laboratory screening procedure that allows manufacturers and designers to pre-select materials based on the flammability of specimens made from non-metallic materials using a glowing wire ignition source.

This Standard forms the first edition of AS/NZS 60695.2.12, *Fire hazard testing - Part 2.12: Glowing/hot wire based test methods - Glow-wire flammability test method for materials*.

This Standard is identical to and is reproduced from IEC 60695-2-12:2000, *Fire hazard testing - Part 2-12: Glowing/hot wire based test methods - Glow-wire flammability test method for materials*.

This Standard is to be used in conjunction with AS/NZS 60695.2.10 and AS/NZS 60695.2.13.

Clause 2 has been reformatted to indicate the Australia/New Zealand standard that is equivalent to the IEC standard or ISO standard to which normative reference is made.

As this Standard is reproduced from an International Standard, the following applies:

- a) Its number does not appear on each page of text and its identity is shown on the cover and title page only.
- b) In the source text "IEC 60695" should read "AS/NZS 60695".
- c) A full point substitutes for a comma when referring to a decimal marker.

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AUSTRALIAN/NEW ZEALAND STANDARD

FIRE HAZARD TESTING –

Part 2.12: Glowing/hot-wire based test methods – Glow-wire flammability test method for materials

1 Scope

This part of IEC 60695 specifies the details of the glow-wire test to be applied to test specimens of solid electrical insulating materials or other solid materials for flammability testing to determine the glow-wire flammability index (GWFI).

The test results make it possible to provide a relative comparison of various materials according to their ability to extinguish flames on removal of the electrically heated glow-wire and their ability not to produce flaming or glowing particles capable of spreading fire to a specified layer of wrapping tissue placed below.

The test method is not valid for determining the flammability of complete items of equipment, since the dimensions of the insulating systems or combustible parts, the design and heat transfer to adjacent metallic or non-metallic parts, etc., greatly influence the flammability of the materials used therein. In addition to this, it is not valid for determining fire behaviour and fire hazard of equipment.

One of the responsibilities of a technical committee is, wherever applicable, to make use of basic safety publications in the preparation of its publications.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 60695. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of IEC 60695 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

<u>IEC standard</u>	<u>Year</u>	<u>Title</u>	<u>AU/NZ standard</u>	<u>Year</u>
IEC 60695-2-10	2000	<i>Fire hazard testing – Part 2-10: Glowing/hot-wire based test methods – Glow-wire apparatus and common test procedure</i>	AS/NZS 606952.10	2001
IEC 60695-2-13	2000	<i>Fire hazard testing – Part 2-13: Glowing/hot-wire based test methods – Glow-wire ignitability test method for materials</i>	AS/NZS 606952.13	2001
ISO/IEC 13943	2000	<i>Fire safety – Vocabulary</i>		