

Australian/New Zealand Standard™

**Performance of commercial ice makers
and ice storage bins**

**Part 1: Test methods for ice makers—
Environmental performance**



AS/NZS 4865.1:2008

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee ME-008, Refrigerated Display Cabinets. It was approved on behalf of the Council of Standards Australia on 26 June 2008 and on behalf of the Council of Standards New Zealand on 8 July 2008.

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The following are represented on Committee ME-008:

Australian Food and Grocery Council
Australian Greenhouse Office, Department of the Environment and Heritage
Australian Industry Group
Air Conditioning and Refrigeration Manufacturers' Association
Australian Institute of Refrigeration Air Conditioning and Heating (Inc)
Australian Retailers Association
Electrical Compliance Testing Association
Energy Efficiency & Conservation Authority of New Zealand
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PREFACE

This Standard was prepared by the members of the Joint Standards Australia/Standards New Zealand Technical Committee ME-008, Refrigerated Display Cabinets.

The objective of this Standard is to provide designers, manufacturers, importers, test laboratories, regulators, and users of ice makers and ice storage bins with test methods and minimum energy performance standard (MEPS) requirements for these devices.

This Standard was prepared in response to the publication of a plan for the regulation of ice makers and ice storage bins under the National Appliance and Equipment Energy Efficiency Program (NAEEEP).

This series consists of 3 parts. These are—

AS/NZS

- 4865 Performance of commercial ice makers and ice storage bins
- 4865.1 Part 1: Test methods for ice makers—Environmental performance
- 4865.2 Part 2: Test methods for ice storage bins—Environmental performance
- 4865.3 Part 3: Minimum energy performance standard (MEPS) requirements

Part 1 (this part) sets out the test methods for measuring the environmental performance and test records of ice makers.

Part 2 sets out the test methods for measuring the environmental performance and test records of ice storage bins.

Part 3 specifies minimum energy performance standard (MEPS) levels for ice makers and ice storage bins and high efficiency levels for ice makers. Regulatory authorities have advised that it is intended to introduce regulations making the requirements of this Standard mandatory in Australia and New Zealand no earlier than 1 October 2009.

The terms ‘normative’ and ‘informative’ are 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.

Statements expressed in mandatory terms in notes to figures are deemed to be requirements of this Standard. ‘Shall’ indicates that a requirement is mandatory, while ‘should’ indicates a recommendation and good practice.

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STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard**Performance of commercial ice makers and ice storage bins****Part 1: Test methods for ice makers—Environmental performance****1 SCOPE**

This Standard specifies methods of measuring the electrical power consumption of water- and air-cooled commercial ice makers connected to a nominal 230 V mains electricity supply.

This Standard applies to batch-type and continuous ice makers that produce ice in irregular shapes, flakes, ribbons or wafers as well as uniformly shaped ice cubes where the finished product does not exceed approximately 100 g in weight.

This Standard—

- (a) specifies methods and procedures for measuring ice-making capacity;
- (b) specifies methods and procedures for measuring the energy consumption of ice makers; and
- (c) specifies methods and procedures for measuring the water consumption of ice makers.

This Standard does not apply to ice-making devices intended to be incorporated in household appliances.

2 NORMATIVE REFERENCES

The following documents are indispensable for the application of this Standard:

AS

2706 Numerical values—Rounding and interpretation of limiting values

IEC

60050-300 International Electrotechnical Vocabulary—Electrical and electronic measurements and measuring instruments

3 DEFINITIONS

For the purposes of this Standard, the following definitions apply. Terms defined in IEC 60050-300 also apply.

3.1 Automatic commercial ice maker

A factory-made assembly (not necessarily shipped in one package) that forms or is intended to form a condensing unit and an ice-making section operating as an integrated unit, with means for making and harvesting ice. It may also include means for storing or dispensing ice, or both.

3.2 Batch-type ice maker

An ice maker that has alternate freezing and harvesting periods.

3.3 Continuous-type ice maker

An ice maker that continually freezes and harvests ice at the same time.