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PERFORMANCE OF HOUSEHOLD ELECTRICAL APPLIANCES— DISHWASHERS



This Australian Standard was prepared by Committee EL/15, Quality and Performance of Household Electrical Appliances. It was approved on behalf of the Council of the Standards Association of Australia on 5 February 1988 and published on 1 March 1988.

The following interests are represented on Committee EL/15:

Australian Consumers Association
Australian Electrical and Electronics Manufacturers Association
Australian Federation of Consumer Organizations
Consumer Electronics Suppliers Association
Department of Consumer Affairs, N.S.W.
Electricity Supply Association of Australia

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The cutlery is made by Kobayashi Industrial P/L. I hope this information will be of assistance.

Regards,

Steven Byrnes
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AUSTRALIAN STANDARD

**PERFORMANCE OF
HOUSEHOLD ELECTRICAL
APPLIANCES—
DISHWASHERS**

AS 2007—1988

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PREFACE

This Standard was prepared by the Association's Committee on Quality and Performance of Household Electrical Appliances, to supersede AS 2007—1977, *Electric dishwashers for household use*. It is based on IEC 436, *Methods for measuring the performance of electric dishwashers*, published by the International Electrotechnical Commission. Acknowledgement is made of the assistance received from that Standard.

The Standard differs from the IEC Standard in a number of ways, as follows:

- The inclusion of design and construction and marking requirements.
- The inclusion of capacity, performance and general requirements for dishwashers and reference machines.
- The food items used for soiling the dishware, etc, are Australian equivalents of those specified in IEC 436.
- A minimum of three test runs is specified for each measurement, with the exception of acoustical noise, as experience has indicated that three measurements are necessary for representative results.
- Measurements of washing performance and drying performance must be carried out separately.
- Tests for energy consumption are corrected for the difference in energy content of the cold or hot water supply used from that of the same quantity of water at 20 °C for those cycles requiring hot water for washing and drying.
- The crockery and glasses used for the washing and drying evaluations represent sizes commercially available in Australia for the catering industry.
- Owing to frequent changes to the design of stainless steel cutlery and serving pieces, acceptance and rejection gauges are specified to standardize these items for the test loads.

As yet, this Standard does not specifically provide for the ability of dishwashers to wash cooking utensils.

In order to facilitate the installation of machines, it is recommended that manufacturers give consideration to standardizing the positions of connection points for water and electricity supplies.

This Standard follows the procedure in IEC 436 of specifying brand names for the ware and food items used in the evaluation. Reference to the brand names has been made to provide for reproducibility of the test methods. In no way is it intended or inferred that any of the specified brands is superior to other brands of the same product.

For comparative testing, the most reliable results will be obtained from the methods of measurement given in this Standard when the measurements are conducted in the same laboratory, at one time, by the same operators. However, compliance with the performance and test requirements of this Standard should ensure that a dishwasher will give satisfactory performance in service.

For determination of the washing and drying indices, the recommended procedure and timing in Appendices A and B is provided to ensure consistent results. Some difficulty may at first be experienced in limiting the examination period of each test piece to three seconds, but experienced judges have found the timing to be quite adequate.

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard

PERFORMANCE OF HOUSEHOLD ELECTRICAL APPLIANCES—DISHWASHERS

SECTION 1. SCOPE AND GENERAL

1.1 SCOPE. This Standard sets out the performance requirements for electric dishwashers for household use.

1.2 OBJECT. The purpose of this Standard is—

- (a) to state and define the principal constructional requirements and performance characteristics of electric dishwashers for household use;
- (b) to specify the standard methods for measuring these characteristics;
- (c) to set levels of performance for these characteristics so that intending purchasers of dishwashers may have a basis for comparison.

NOTE: For comparative testing the most reliable results will be obtained from the methods of measurement given in this Standard where the measurements on the machines to be compared are made in the same laboratory—

- (a) at the same time, by the same test personnel; or
- (b) each at the same time as measurements made on a reference machine by the same test personnel.

For determination of washing and drying indexes in accordance with this Standard, it is essential to use a reference machine.

Comparison of reference machine performance between laboratories is encouraged but is not essential for the certification of satisfactory performance of dishwashers to this Standard provided each reference machine used meets the requirements of this Standard for reference machines.

1.3 APPLICATION. This Standard is intended as a reference by persons concerned with the manufacture and testing of dishwashers for household use.

In the application of this Standard—

- (a) the word 'shall' indicates a mandatory or necessary requirement for compliance with the Standard; and
- (b) the words 'should' and 'may' indicate a non-mandatory alternative.

In addition, notes give explanatory or illustrative material only and are not part of the requirements of this Standard.

1.4 REFERENCED DOCUMENTS. The following Standards are referred to in this Standard:

AS	
1351	Spaces in dwellings (metric units) Part 1: Kitchens (AS 1351.1)
2202	Code of practice for the provision of warranties/guarantees for household goods
2323	Provision of point-of-sale information for household goods (buy guide)
2700	Colour standards for general purposes
3184	Approval and Test Specification—Electric dishwashing machines
BS	
950	Artificial daylight for the assessment of colour Part 1: Illuminant for colour matching and colour appraisal
IEC	
436	Methods for measuring the performance of electric dishwashers
704-2-3	Test code for the determination of airborne acoustical noise emitted by household and similar electrical appliances Part 2: Particular requirements for dishwashers*

1.5 SAFETY REQUIREMENTS. The Standard does not include the electrical safety requirements which must be observed to ensure approval for connection or sale of household electric dishwashers. An electric dishwasher shall comply with the requirements of AS 3184.

* An Australia Standard, in course of preparation, may be used instead for noise testing when available.