

Australian Standard<sup>®</sup>

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**PERFORMANCE OF HOUSEHOLD  
ELECTRICAL APPLIANCES**

**RANGES, BUILT-IN COOKING  
TOPS AND WALL-MOUNTED  
OVENS**

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[Title allocated by the Defence Cataloguing Authority: RANGE  
ELECTRIC; HOT PLATE, ELECTRIC; OVENS, BAKING AND  
ROASTING, DECK AND PORTABLE (DOMESTIC)]

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 6 May 1983 and published on 4 July 1983.

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The following interests are represented on Committee EL/15:

Australian Consumers Association  
Australian Electrical and Electronic Manufacturers Association  
Australian Federation of Consumer Organizations  
Australian Retailers Association  
Confederation of Australian Industry  
Department of Consumer Affairs, N.S.W.  
Electricity Supply Association of Australia  
Housing Commission of New South Wales

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This Standard was issued in draft form for comment as DR 80165.

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First published (as AS C310) .....	1966
Revised and issued as AS 1549 .....	1974
Second edition .....	1983

PUBLISHED BY STANDARDS AUSTRALIA  
(STANDARDS ASSOCIATION OF AUSTRALIA)  
1 THE CRESCENT, HOMEBUSH, NSW 2140

ISBN 0 7262 3012 X

## PREFACE

This edition of this standard was prepared by the Association's Committee on Quality and Performance of Household Electrical Appliances to supersede AS 1549—1974.

The standard is not based on IEC standards but has been developed over a long period of time in a succession of editions to meet the performance requirements desired for cooking Australian type meals. Figs 3.1 to 3.3 provide for the acceptance of standard radiant type hotplates in accordance with AS 1550.

No reference is made to the use of asbestos for thermal or electrical insulation in this standard owing to the possibility of loose fibres which may constitute a health hazard.

This edition incorporates Amendments 1 to 3 to AS 1549—1974 issued September 1975, November 1977 and November 1978. This edition also includes new definitions for smooth-top cooking surfaces and fan-forced ovens, revised requirements for exterior finishes, strength and corrosion resistance of oven shelves, revised hob dimensions for standard hotplates, provision of indicator light(s) for hotplate elements, mounting provisions for replacement of standard controls, and revised point-of-sale information. Hob openings have been modified to suit standard plug-in circular radiant type hotplates, and standard receptacle and electrical connection details for circular radiant type plug-in hotplates have been added. The test requirements for the performance of catalytic cleaning ovens have been modified in Appendix G and the grilling test in Appendix E has been amended.

Requirements are included for smooth-top cooking surfaces and Appendix C specifies maximum heat loss requirements for both conventional and fan-forced ovens.

It is intended that the date of application of the new provisions of this edition, for the purposes of certification in accordance with the AS Mark scheme (see Clause 4.2), be 12 months from the date of publication.

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## STANDARDS ASSOCIATION OF AUSTRALIA

## Australian Standard

for

**PERFORMANCE OF HOUSEHOLD ELECTRICAL APPLIANCES—  
RANGES, BUILT-IN COOKING TOPS AND WALL-MOUNTED OVENS**

## SECTION 1. SCOPE AND GENERAL

**1.1 SCOPE.** This standard specifies requirements for household electric ranges, both fixed and portable, intended for operation by direct or alternating current at low or medium voltage, including independent ovens and cooking tops.

The standard includes provisions relating to construction and finish, minimum performance requirements, and standard methods of testing.

This standard includes requirements for catalytic cleaning oven components, but does not include requirements for microwave ovens or the special requirements for pyrolytic cleaning ovens.

**1.2 OBJECT.** The object of this standard is to establish a quality level which will ensure that household electric ranges complying with its requirements are robustly and durably constructed, easily serviced and give reliable cooking performance.

**1.3 APPLICATION.** This standard is intended to provide the technical and performance requirements to be used in the purchase of household electric ranges by users or by electricity supply or other authorities.

The purchaser, when ordering, should specify the relevant conditions with regard to size and type of household electric ranges, e.g. the number and rating of hotplates, details of other cooking facilities required, upright or elevated oven.

**1.4 REFERENCED DOCUMENTS.** The following standards are referred to in this standard:

- AS 1044 Limits of Electromagnetic Interference for Electrical Appliances and Equipment
- AS 1192 Electroplated Coatings—Nickel and Chromium
- AS 1397 Hot-dipped Zinc-coated or Aluminium/Zinc-coated Sheet Steel in Coil and Cut Lengths

- AS 1449 Wrought Alloy Steels—Stainless and Heat-resisting Steel Plate, Sheet and Strip
- AS 1550 Performance of Household Electrical Appliances—Hotplates for Use in Ranges and Built-in Cooking Tops
- AS 1551 Performance of Household Electrical Appliances—Manually Operated Controls for Heating Units in Ranges, Built-in Cooking Tops and Wall-mounted Ovens
- AS 2219 Method of Test for Vitreous Enamel Coatings
- AS 2323 Provision of Point-of-sale Information for Household Goods (Buy Guide)
- AS 3170 Approval and Test Specification for Definitions and General Requirements for Electrical Materials and Equipment
- AS 3172 Approval and Test Specification for Electric Cooking Appliances for Household Use
- AS K108 Metal Priming Paint, Anti-corrosive
- AS K126 Full Gloss Enamel, Oil and Petrol Resistant
- BS 3643 ISO Metric Screw Threads  
Part 3—Limits and Tolerances for Fine Pitch Threads (Constant Pitch Series)

**1.5 SAFETY REQUIREMENTS.** This standard does not include the electrical safety requirements which must be observed to secure approval for connection or sale of household electric ranges in all States. A household electric range shall, in addition to complying with this standard, comply with AS 3172.