

Australian/New Zealand Standard™

**Approval and test specification—Plugs  
and socket-outlets for stationary  
appliances**



## **AS/NZS 3131:2015**

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-004, Electrical Accessories. It was approved on behalf of the Council of Standards Australia on 7 May 2015 and on behalf of the Council of Standards New Zealand on 25 June 2015.

This Standard was published on 10 July 2015.

---

The following are represented on Committee EL-004:

Australian Chamber of Commerce and Industry  
Australian Industry Group  
Consumer Electronics Suppliers Association  
Consumers Federation of Australia  
Electrical Compliance Testing Association  
Electrical Regulatory Authorities Council  
Engineers Australia  
International Accreditation New Zealand  
Ministry of Business, Innovation and Employment, New Zealand  
New Zealand Manufacturers and Exporters Association  
Office of Fair Trading, NSW  
Plastics Industry Pipe Association of Australia

---

### **Keeping Standards up-to-date**

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about joint Australian/New Zealand Standards can be found by visiting the Standards Web Shop at [www.saiglobal.com.au](http://www.saiglobal.com.au) or Standards New Zealand website at [www.standards.co.nz](http://www.standards.co.nz) and looking up the relevant Standard in the on-line catalogue.

For more frequent listings or notification of revisions, amendments and withdrawals, Standards Australia and Standards New Zealand offer a number of update options. For information about these services, users should contact their respective national Standards organization.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia or Standards New Zealand at the address shown on the back cover.

---

*This Standard was issued in draft form for comment as DR AS/NZS 3131:2015.*

---

Australian/New Zealand Standard™

**Approval and test specification—Plugs  
and socket-outlets for stationary  
appliances**

Originated in Australia as AS 3131—1990.  
Originated in New Zealand as AS/NZS 3131:1995.  
Previous edition 2001.  
Fourth edition 2015.

**COPYRIGHT**

© Standards Australia Limited/Standards New Zealand

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968 (Australia) or the Copyright Act 1994 (New Zealand).

Jointly published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001 and by Standards New Zealand, Private Bag 2439, Wellington 6140.

## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-004 on Electrical Accessories, to supersede AS/NZS 3131:2001.

The objective of this Standard is to provide requirements for plugs and socket-outlets having current ratings not exceeding 32 A, intended for indoor use, and at voltages not exceeding 500 V a.c., for the purpose of enabling connection and disconnection of fixed stationary appliances (such as stoves) to the installation wiring.

While this Standard depicts only one standardized configuration (in Appendix A), it may be applied to configurations and contact types other than that depicted herein, providing all appropriate requirements of this Standard are complied with.

This Standard is one of a series of approval and test specifications issued jointly by Standards Australia and Standards New Zealand. These specifications are to be read in conjunction with AS/NZS 3100, *Approval and test specification—General requirements for electrical equipment*.

The essential safety requirements in AS/NZS 3820, *Essential safety requirements for electrical equipment*, that could be applicable to switches are covered by this Standard.

This edition of AS/NZS 3131 contains the following changes from the 2001 edition:

- (a) Referenced documents updated.
- (b) The first temperature rise test for socket-outlets is no longer required.
- (c) Changes to location of marking requirements.
- (d) Change to high voltage test.
- (e) Addition of the child's test finger of IEC 61032 Probe 19.

The term 'normative' has been used in this Standard to define the application of the appendix to which it applies. A 'normative' appendix is an integral part of a Standard.

## CONTENTS

	<i>Page</i>
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE.....	4
1.2 APPLICATION .....	4
1.3 REFERENCED DOCUMENTS.....	4
1.4 DEFINITIONS.....	5
SECTION 2 PLUGS	
2.1 TERMINALS AND INTERNAL CONNECTIONS .....	6
2.2 PLUG PINS .....	6
2.3 INSULATING MATERIALS .....	7
2.4 NON-REWIREABLE PLUGS.....	7
2.5 METHOD OF ENTRY AND ANCHORAGE FOR CABLE, FLEXIBLE CABLE OR FLEXIBLE CORD.....	7
2.6 STRENGTH OF SCREW THREADS AND FIXINGS.....	7
2.7 RATING AND DIMENSIONS.....	7
2.8 INTERNAL CONNECTIONS.....	8
2.9 FUSES .....	8
2.10 MARKING .....	8
2.11 TESTS ON PLUGS .....	9
SECTION 3 SOCKET OUTLETS	
3.1 TERMINALS AND INTERNAL CONNECTIONS .....	11
3.2 SOCKET-OUTLET CONTACTS.....	11
3.3 INSULATING MATERIALS .....	11
3.4 STRENGTH OF SCREW THREADS AND FIXINGS.....	11
3.5 RATING AND DIMENSIONS.....	12
3.6 ARRANGEMENT OF EARTHING CONNECTIONS .....	12
3.7 PREVENTION OF CONTACT WITH LIVE PINS.....	12
3.8 PROHIBITED ARRANGEMENTS.....	12
3.9 SWITCHES .....	12
3.10 MARKING .....	13
3.11 TESTS FOR SOCKET-OUTLETS .....	13
APPENDIX A RATINGS, DIMENSIONS AND KEYWAY LOCATIONS .....	17

## STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

**Australian/New Zealand Standard****Approval and test specification—Plugs and socket-outlets for stationary appliances**

## SECTION 1 SCOPE AND GENERAL

**1.1 SCOPE**

This Standard specifies the requirements for plugs and socket-outlets having current rating not exceeding 32 A, intended for indoor use, and at voltages not exceeding 500 V a.c. for the purpose of enabling connection and disconnection of stationary appliances such as cooking ranges, hobs and ovens. A standardized configuration is given in Appendix A.

This Standard may be applied to configurations and contact types other than those depicted herein providing all appropriate (to that type) requirements of this Standard are complied with.

This Standard does not apply to the following:

- (a) Appliance couplers for household and similar general purposes within the scope of AS/NZS 60320.1
- (b) Plugs and socket-outlets within the scope of AS/NZS 3112.
- (c) Cord extension sockets and inlet plugs within the scope of AS/NZS 3120.
- (d) Socket-outlet adaptors within the scope of AS/NZS 3122.
- (e) Plugs, socket-outlets and couplers for general industrial application within the scope of AS/NZS 3123.
- (f) Installation couplers within the scope of AS/NZS 61535.

**1.2 APPLICATION****1.2.1 General requirements of AS/NZS 3100**

This Standard shall be read in conjunction with AS/NZS 3100. The appropriate provisions of AS/NZS 3100 shall apply to the construction of a plug or socket-outlet and the insulation and safeguarding of parts that normally carry current.

**1.2.2 Specific requirements of this Standard**

A plug or socket-outlet shall be deemed to comply with this Standard only if it complies with all the appropriate requirements of this Standard and passes the relevant tests specified herein.

**1.3 REFERENCED DOCUMENTS**

The following documents are referred to in this Standard.

NOTE: For New Zealand, where no relevant New Zealand Standard is listed, the referenced Australian Standard is deemed to be appropriate for the purpose of this Standard.

AS	
60529	Degrees of protection provided by enclosures (IP Code)