

*Dup*

Superseded by AS/NZS 3131:1995

AS 3131—1990

Australian Standard®

---

**Approval and test specification—  
Plugs and socket outlets for use in  
installation wiring systems**

---

Currently in preview, click to buy full version

F



This Australian Standard was prepared by Committee EL/4, Electrical Accessories. It was approved on behalf of the Council of Standards Australia on 19 February 1990 and published on 11 June 1990.

---

The following interests are represented on Committee EL/4:

Australian Electrical and Electronic Manufacturers Association  
Confederation of Australian Industry  
Department of Public Works, N.S.W.  
Electrical Contractors Association of Australia  
Electricity Supply Association of Australia  
Plastics Industry Association  
Railways of Australia Committee  
Regulatory Authorities (Electrical)  
Telecom Australia

---

**Review of Australian Standards.** To keep abreast of progress in industry, Australian Standards are subject to periodic review and are kept up-to-date by the issue of amendments or new editions as necessary. It is important therefore that Standards users ensure that they are in possession of the latest edition, and any amendments thereto.

Full details of all Australian Standards and related publications will be found in the Standards Australia Catalogue of Publications; this information is supplemented each month by the magazine 'The Australian Standard', which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.

Suggestions for improvements to Australian Standards, addressed to the head office of Standards Australia, are welcomed. Notification of any inaccuracy or ambiguity found in an Australian Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

---



STANDARDS AUSTRALIA

**Amendment No. 2**  
to  
**AS 3131—1990**  
**Approval and test specification—Plugs and socket-outlets**  
**for use in installation wiring systems**

**REVISED TEXT**

The 1990 edition of AS 3131 is amended as follows; the amendments should be inserted in the appropriate place.

*SUMMARY:* This Amendment applies to Table 2.1, Table 3.1 and Clause 3.13.3.

Published on 11 April 1994.

AMDT  
No. 2  
APR.  
1994

**Page 8 Table 2.1**

*Add the following note:*

NOTE: For Test No. 8, the test for attachment of flexible cord is not required.

**This Amendment forms part of the Specification on publication.**

AMDT  
No. 2  
APR.  
1994

**Page 12 Table 3.1**

*Add the following note:*

NOTE: Test No. 10 is not applicable to socket-outlets with retaining devices.

**This Amendment forms part of the Specification on publication.**

AMDT  
No. 2  
APR.  
1994

**Page 12 Clause 3.13.3 Item (b)**

*Delete the second sentence and insert the following:*

If a socket-outlet is intended for fixing to a surface, the socket-outlet shall be mounted on an earthed metal plate by means of fixing screws corresponding in diameter, size and type of head to the screws that would normally be used for fixing the accessory.

**This Amendment forms part of the Specification on publication.**

Dup

STANDARDS AUSTRALIA



Amendment No. 1  
to  
AS 3131—1990  
Approval and test specification—  
Plugs and socket-outlets for use in installation wiring systems

REVISED TEXT

The 1990 edition of AS 3131 is amended as follows; the amendments should be inserted in the appropriate place.

SUMMARY: This Amendment applies to Clauses 2.10.5, 2.11, 3.11.4 and 3.12.

Published on 21 December 1992.

AMDT  
No. 1  
DEC.  
1992

**Page 7 Clause 2.10.5**

In the last sentence after 'L3' insert the following:  
'or the numbers '1', '2', '3' '.

This Amendment forms part of the Specification on publication.

AMDT  
No. 1  
DEC.  
1992

**Page 8 Clause 2.11**

In the third line delete 'or 6'.

This Amendment forms part of the Specification on publication.

AMDT  
No. 1  
DEC.  
1992

**Page 11 Clause 3.11.4**

In the last sentence after 'L3' insert the following:  
'or the numbers '1', '2', '3' '.

This Amendment forms part of the Specification on publication.

AMDT  
No. 1  
DEC.  
1992

**Page 11 Clause 3.12**

In the last sentence delete 'or 6'.

This Amendment forms part of the Specification on publication.

Australian Standard®

---

**Approval and test specification—  
Plugs and socket-outlets for use in  
installation wiring systems**

---

First published as AS 3131—1990.

## PREFACE

This Standard was prepared by the Standards Australia Committee on Electrical Accessories.

It is one of a series of Approval and Test Specifications issued by the organization. These Specifications are accompanied by a general Specification AS 3100, containing definitions and general requirements for electrical materials and equipment. The purpose of these Specifications is to outline conditions which must be met to secure approval for the sale and use of electrical equipment in Australia. Only safety matters and related conditions are covered.

This Specification applies to plugs and socket-outlets having current ratings not exceeding 40 A, intended for indoor use, and at voltages not exceeding 500 V a.c., for the purpose of enabling connection and disconnection at will of the wiring system of an installation. Standardized configurations are given in Appendix A.

This Specification also applies to plugs and socket-outlets used for removable partitions and for the connection of stationary equipment.

While this Standard only depicts standardized configurations, it may be applied to configurations and contact types other than those depicted herein, providing all appropriate requirements of this Standard are complied with.

This Specification has been prepared based on the principles of AS 3112, *Approval and test specification—Plugs and socket-outlets*.

The organization desires to call attention to the fact that this Specification does not purport to include all the necessary provisions of a contract.

### © Copyright — STANDARDS AUSTRALIA

Users of Standards are reminded that copyright subsists in all Standards Australia publications and software. Except where the Copyright Act allows and except where provided for below no publications or software produced by Standards Australia may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from Standards Australia. Permission may be conditional on an appropriate royalty payment. Requests for permission and information on commercial software royalties should be directed to the Head Office of Standards Australia.

Standards Australia will permit up to 10 percent of the technical content pages of a Standard to be copied for use exclusively in-house by purchasers of the Standard without payment of a royalty or advice to Standards Australia.

Standards Australia will also permit the inclusion of its copyright material in computer software programs for no royalty payment provided such programs are used exclusively in-house by the creators of the programs.

Care should be taken to ensure that material used is from the current edition of the Standard and that it is updated whenever the Standard is amended or revised. The number and date of the Standard should therefore be clearly identified.

The use of material in print form or in computer software programs to be used commercially, with or without payment, or in commercial contracts is subject to the payment of a royalty. This policy may be varied by Standards Australia at any time.

## CONTENTS

	<i>Page</i>
<b>SECTION 1 SCOPE AND GENERAL</b>	
1.1 SCOPE .....	4
1.2 APPLICATION .....	4
1.3 REFERENCED DOCUMENTS .....	4
1.4 DEFINITIONS .....	4
1.5 MEANS OF RETENTION OF A PLUG AND SOCKET-OUTLET .....	5
<b>SECTION 2 PLUGS</b>	
2.1 TERMINALS AND INTERNAL CONNECTIONS .....	5
2.2 PLUG PINS .....	6
2.3 INSULATING MATERIALS .....	6
2.4 NON-REWIRABLE PLUGS .....	6
2.5 METHOD OF ENTRY AND ANCHORAGE FOR CABLE, FLEXIBLE CABLE OR FLEXIBLE CORD .....	6
2.6 STRENGTH OF SCREW THREADS AND FIXINGS .....	6
2.7 RATING AND DIMENSIONS .....	7
2.8 INTERNAL CONNECTIONS .....	7
2.9 FUSES .....	7
2.10 MARKING .....	7
2.11 IP DESIGNATED PLUGS .....	8
2.12 TESTS ON PLUGS .....	8
<b>SECTION 3 SOCKET-OUTLETS</b>	
3.1 TERMINALS AND INTERNAL CONNECTIONS .....	10
3.2 SOCKET-OUTLET CONTACTS .....	10
3.3 INSULATING MATERIALS .....	10
3.4 STRENGTH OF SCREW THREADS AND FIXINGS .....	10
3.5 RATING AND DIMENSIONS .....	10
3.6 ARRANGEMENT OF EARTHING CONNECTIONS .....	10
3.7 PREVENTION OF CONTACT WITH LIVE PINS .....	10
3.8 PROHIBITED ARRANGEMENTS .....	11
3.9 SWITCHES .....	11
3.10 FLOOR SOCKET-OUTLETS .....	11
3.11 MARKING .....	11
3.12 IP DESIGNATED SOCKET-OUTLETS .....	11
3.13 TESTS FOR SOCKET-OUTLETS .....	12
APPENDIX A. RATINGS, DIMENSIONS, KEYWAY LOCATIONS AND MEANS OF RETENTION .....	14

## STANDARDS AUSTRALIA

## Australian Standard

## Approval and test specification—Plugs and socket-outlets for use in installation wiring systems

## SECTION 1 SCOPE AND GENERAL

**1.1 SCOPE.** This Specification applies to plugs and socket-outlets having current ratings not exceeding 40 A, intended for indoor use, and at voltages not exceeding 500 V a.c., for the purpose of enabling connection and disconnection at will of the wiring system of an installation. Standard configurations are given in Appendix A. This Specification also applies to plugs and socket-outlets used for removable partitions and for the connection of stationary equipment.

This Specification does not apply to the following:

- (a) Appliance couplers for household and similar general purposes within the scope of AS 3109.
- (b) Plugs and socket-outlets within the scope of AS 3112.
- (c) Cord extension sockets within the scope of AS 3120.
- (d) Socket-outlet adaptors within the scope of AS 3122.
- (e) Plugs, socket-outlets and couplers for general industrial application within the scope of AS 3123.

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

**1.2 APPLICATION.**

**1.2.1 General requirements of AS 3100.** This Specification shall be read in conjunction with AS 3100 and the appropriate provisions of AS 3100 shall apply to the construction of a plug or socket-outlet and the insulation and safeguarding of parts which normally carry current.

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

**1.3 REFERENCED DOCUMENTS.** The documents below are referred to in this Standard.

**STANDARDS****AS**

1939 Classification of degrees of protection provided by enclosures of electrical equipment

2420 Fire test methods for solid insulating materials and non-metallic enclosures used in electrical equipment

3000 SAA Wiring Rules

**APPROVAL AND TEST SPECIFICATIONS****AS**

3100 Definitions and general requirements for electrical materials and equipment

3109 Appliance couplers for household and similar general purposes

3112 Plugs and socket-outlets

3120 Cord extension sockets

3122 Socket-outlet adaptors

3123 Plugs, socket-outlets and couplers for general industrial application

3127 Cord-line switches

3133 Air break switches

3300 General requirements for household and similar electrical appliances

**1.4 DEFINITIONS.** For the purpose of this Specification, the definitions below apply.

**1.4.1 Plug**—an accessory having pins designed to engage with the contacts of a socket-outlet also incorporating means for the electrical connection and mechanical retention of cables, flexible cables or flexible cords.

**1.4.2 Socket-outlet**—an accessory having socket-contacts designed to engage with the pins of a plug and having terminals for the connection of cables, flexible cables or flexible cords.