

Australian Standard[®]

**APPROVAL AND TEST
SPECIFICATION —
CEILING ROSES**

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- Australian Electrical and Electronic Manufacturers Association Ltd
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PREFACE

This edition of this standard was prepared by the Association's Committee EL/4, Electrical Accessories.

It is one of a series of approval and test specifications issued by the Association. 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 edition was published to update the general requirements, introduce requirements providing protection against inadvertent contact with adjacent terminals, and to extend the voltage and current ratings to cover both low and medium voltages up to and including 16 A.

This standard supersedes AS C327-1961 from date of publication.

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

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard
APPROVAL AND TEST SPECIFICATION — CEILING ROSES

This specification shall be read in conjunction with AS 3100 (see also Clause 3 below).

1 SCOPE AND REFERENCED DOCUMENTS.

1.1 Scope. This specification applies to ceiling roses having a current rating up to and including 16 A and intended for use at low and medium voltages.

1.2 Referenced documents. The following standards are referred to in this standard:

AS 3000 SAA Wiring Rules

AS 3100 Approval and Test Specification — Definitions and General Requirements for Electrical Materials and Equipment

AS 3121 Approval and Test Specification for Insulating Mouldings

2 DEFINITIONS. For the purpose of this specification, the following definitions apply:

2.1 Ceiling rose — a device intended primarily for mounting on a ceiling, and incorporating facilities for effecting a junction between a flexible cord and a cable of an electrical installation.

2.2 Surface ceiling rose — a ceiling rose intended for mounting on a flat surface, mounting device, or junction box, and when so mounted having its connecting facilities exposed by the removal of a detachable cover.

2.3 Flush ceiling rose — a ceiling rose intended for mounting on a junction box, and when so mounted having its connecting facilities contained within the box.

3 COMPLIANCE WITH SPECIFICATIONS.

3.1 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 ceiling rose and the insulation and safeguarding of parts which normally carry current.

3.2 Specific requirements of this specification. A ceiling rose 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.

4 DESIGN AND CONSTRUCTION.

4.1 General. Ceiling roses shall be of robust design and construction, have adequate mechanical strength, and shall contain adequate facilities for the connection of fixed wiring and of a flexible cord.

4.2 Insulating material. The insulating portions of ceiling roses shall consist of —

- (a) insulating material having properties not inferior to those of Class 100 mouldings complying with AS 3121; or
- (b) ceramic material of a type such that, after immersion in water for 48 h and after all visible drops of water have been removed from the surface

by means of a clean dry cloth, it shall not have increased in mass by more than 2 percent.

All insulating materials, except ceramic, used in the construction of a ceiling rose shall further comply with the requirements of Clause 8.7.

4.3 Terminals.

4.3.1 General. Terminals shall be of suitable corrosion-resisting metal of sufficient hardness and rigidity for the intended application.

4.3.2 Number and size. Ceiling roses shall be provided with not less than three sets of terminals. Each set shall be capable of accommodating three fixed wiring conductors, plus one flexible cord conductor of appropriate sizes according to the current rating of the ceiling rose. In addition, one of the three sets of terminals shall be for the termination of an earthing conductor and identified in accordance with Clause 7.3.

4.4 Strength of screw threads and fixing. All screws which have to be removed or loosened for the purpose of connecting conductors shall pass the test specified in Clause 8.7 of AS 3100.

5 BODY.

5.1 General. The design and arrangement of the mounting face shall be such as will ensure an even and firm seating when the ceiling rose is mounted as intended.

Where knock-outs are provided in the wall forming the recess, they shall not substantially reduce the wall strength.

5.2 Holes for fixing screws. At least two holes shall be provided for fixing screws.

The holes shall be positioned and arranged so that the fixing screws do not make contact with live metal parts during normal insertion and withdrawal. In addition, the holes shall, for ceiling roses intended for use with junction boxes, be symmetrically disposed (on a diameter or a line), and for all other types be substantially symmetrical.

5.3 Attachment of cover. Where a cover is provided, suitable means shall be incorporated in the body of the ceiling rose for securely fixing the cover in position. Where a screw-on cover is provided, an appropriate flange or stop shall be incorporated in the body against which the cover may bear evenly.

5.4 Insulating barriers. Live parts shall be separated from each other, from earthing terminals, and from earthed metal if any, by insulating barriers that form an integral part of the ceiling rose, or of the terminals.

5.5 Cord anchorage. Ceiling roses shall be provided with an arrangement which will effectively reduce the stress on the flexible cord terminals, and which will pass the tests of Clause 8.5.