STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Amendment No. 1
to
AS/NZS 3100:2002
Approval and test specification –

General requirements for electrical equipment

REVISED TEXT

The 2002 edition of AS/NZS 3100 is amended as follows; the amendments should be inserted in the appropriate places.

SUMMARY: This amendment applies to Clause 1.3, 2.1.44, 3.2, 3.8.5, 3.10, 4.1.4.5, 4.4.1, 5.1, 5.3.4, 5.4.5, 6.3, Annex A 6.1.2, B3.2, B3.4 and figure D1.

Published on 14 November 2003.

Approved for publication in Australia on behalf of the Council of Standards Australia on 1st September 2003.

Approved for publication in New Zealand by the Standards Council of New Zealand on 9th September 2003.

1.3 Delete reference to the following standards

AS 3133	Air break switches
UL 94	Tests for flammability of plastic materials for parts in devices and appliances
AS/NZS 4695.112	Fire Hazard testing of electrotechnical products - Method for the determination of the comparative and the proof tracking indices of solid insulating materials under moist conditions

Add reference to the following AS/NZS standards

3133	Air break switches
60695.11.10	Fire hazard testing – Part 11.10: Test flames – 50 W horizontal and vertical flame test methods
60112	Method for the determination of the proof and the comparative tracking indices of solid insulating materials

This Amendment forms part of the Standard on publication.

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2.1.44 Replace the text of the definition by the following.

a multi-pole switch that has as its prime function the interruption of electricity to all live parts on the load side of the switch.

This Amendment forms part of the Standard on publication.

3.2 Replace the Note by the following.

NOTE Non-hygroscopic material is taken to be material that does not, after being conditioned in an oven at 50 °C ± 5°C for 24 h ± 1 h and then cooled in a desiccator, absorb greater than 5% by weight of moisture during a 48 hour treatment in a humidity of 95% at a temperature of 20 °C ± 5 °C.

This Amendment forms part of the Standard on publication.

3.8.5 Replace the text by the following.

Any switch incorporated in equipment shall be a Category 1, 2 or 3 switch, as appropriate or comply with AS/NZS 61058 series, in accordance with the conditions occurring in the appliance. A Category 1 switch shall comply with the relevant requirements of AS/NZS 3133, and its 'off' position shall be marked in accordance with Clause 3.8.2 herein.

A Category 2 switch shall comply with the relevant requirements of AS/NZS 3133, and its 'off' position need not be marked.

A Category 3 switch shall satisfy the test requirements of Clauses 13.2, 13.3 and 13.4 of AS/NZS 3133, and its 'off' position need not be marked. In addition it shall be subjected to 50 operations of making and breaking the normal load current of the circuit it controls, in accordance with Clause 13.5.5 and Table 2 of AS/NZS 3133, except that where appropriate for circuits including motors, the test current and power factor shall be the equivalent current and power factor of the circuit which the switch controls, with the rotors locked. The rate of operation shall be in accordance with Clause 13.10 of AS/NZS 3133.

In addition, where Category 1 and 2 switches control circuits containing motors, these switches shall be subjected to a further 50 operations. The test current and power factor shall be equivalent to the current and power factor of the circuit with rotors locked and the rate of operation shall be in accordance with Clause 13.10 of AS/NZS 3133.

A Category 1 switch shall be used when

(a) the equipment is intended for connection to the supply by a plug and flexible cord;

(b) notwithstanding Clause 5.1, it is not usual or possible to guard live parts completely against personal contact, because of the intended use and generally accepted practice with any particular equipment; and

(c) the equipment is of a type that is usually left connected to the outlet socket indefinitely, and which has not been provided with a means to indicate whether it is energized or not.

NOTE 1 The specification of a particular category of switch in an individual Standard does not necessarily preclude the use of a switch with a lower category number.

NOTE 2 Typical examples of equipment to which conditions (a) to (c) could apply include automatic toasters.

NOTE 3 A Category 3 switch, tested to the above requirements, would not automatically qualify for an 'M' rating in accordance with AS/NZS 3133.

This Amendment forms part of the Standard on publication.

3.10 Replace this clause including figure 3.10 by the following.

3.10 EQUIPMENT INTENDED TO BE SUPPORTED BY CONTACTS OF SOCKET-OUTLETS

Appliances having integral pins for insertion into socket outlets shall comply with Appendix J of AS/NZS 3112.

This Amendment forms part of the Standard on 3 April 2005.

4.1.4.5 Add the following Note.

NOTE 4 For the purposes of table 4.1, materials with a comparative tracking index (CTI) exceeding 600, in accordance with AS/NZS 60112, are considered to be materials that are similar to ceramic and pure mica.

This Amendment forms part of the Standard on publication.

4.4.1 Delete "or medium" from the first line.

This Amendment forms part of the Standard on publication.

5.1 Add the following subclause

5.1.1 Class II CONSTRUCTION

Class II appliances and class II constructions shall be constructed and enclosed so that there is adequate protection against accidental contact with basic insulation and metal parts separated from live parts by basic insulation only.

It shall only be possible to touch parts which are separated from live parts by double insulation or reinforced insulation.

Compliance is checked by inspection and by applying the test finger of figure 8.10, as described in clause 8.10.

NOTE 1 This requirement applies for all positions of the appliance when it is operated as in normal use, even after opening lids and doors and removal of detachable parts.

NOTE 2 Built-in appliances and fixed appliances are tested after installation.

This Amendment forms part of the Standard on publication.

5.3.4 Replace the text by the following.

The resistance between the earthing facility and any exposed metal parts shall not exceed 1 Ω for readily accessible exposed metal parts that rotate, reciprocate or oscillate continuously, and 0.1 Ω in all other cases, when tested in accordance with Clause 8.4.

This Amendment forms part of the Standard on publication.

5.4.5 Replace "Clause 2.1.2.6" by "Clause 2.1.23"

This Amendment forms part of the Standard on publication.

6.3 Add the following

Alternatively, compliance may be checked as specified in Clause 30.2 of AS/NZS 60335.1.

This Amendment forms part of the Standard on publication.

Annex A, 6.1.2 Replace Note 4 by the following.

NOTE 4 Where the printed wiring board is in a metal enclosure which would prevent any flames from escaping, or if evidence is provided that a printed wiring board, together with any coating, has been given a rating of V-O when tested in accordance with AS/NZS 60695.11.10 or equivalent requirements, this test may be waived.

This Amendment forms part of the Standard on publication.

B3.2 Replace Note 3 by the following.

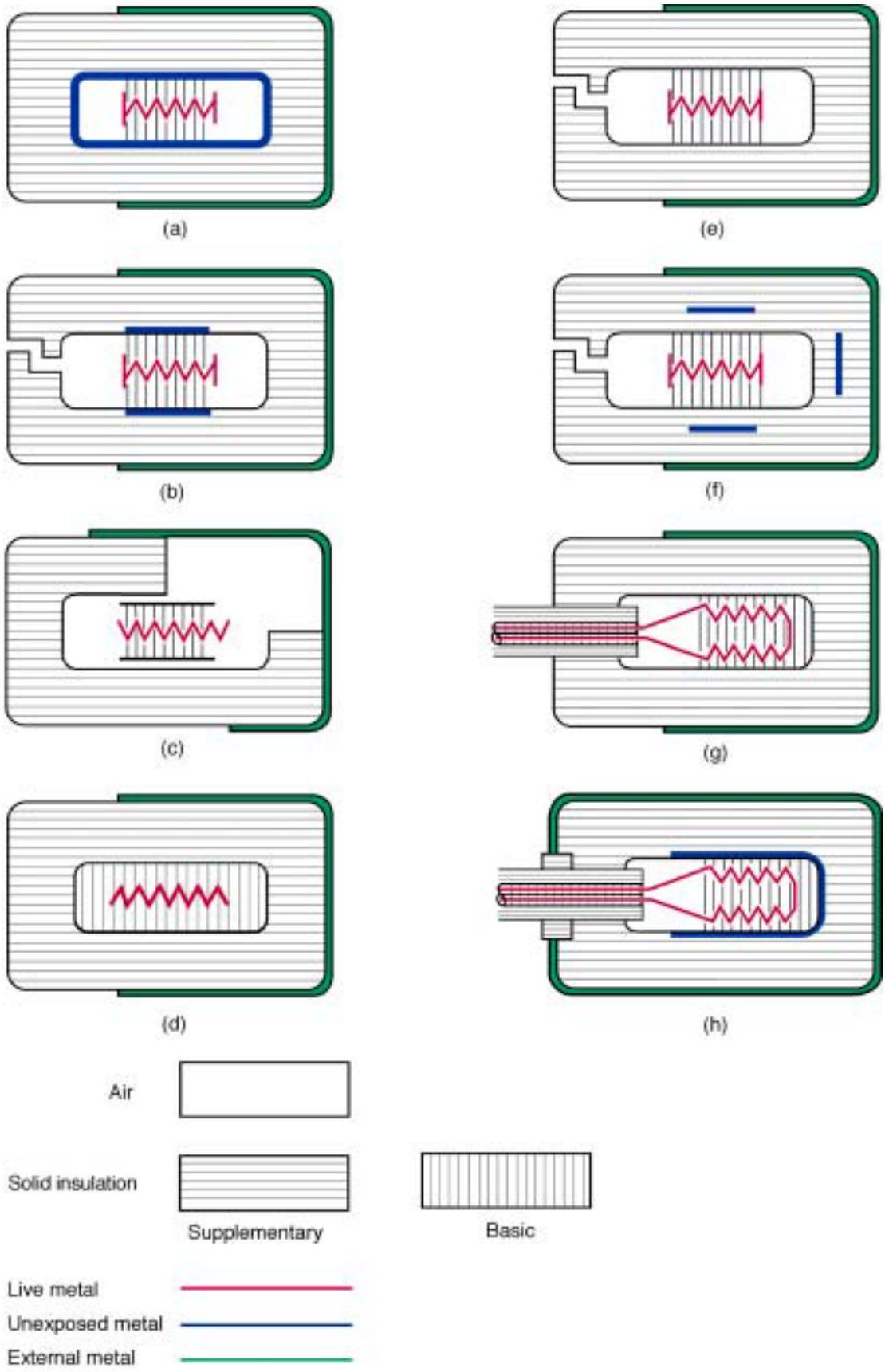
NOTE 3 If evidence is provided that a printed wiring board, together with any coating, has been given a rating of V-0 when tested to AS/NZS 60695.11.10 or equivalent requirements, this test may be waived.

This Amendment forms part of the Standard on publication.

B3.4 item (a) Replace "5.4" by "8.4".

This Amendment forms part of the Standard on publication.

Figure D1 Replace the figure by the following.



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