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Australian Standard 1795, Part 1—1983

SHEETS AND BOARDS FOR ELECTRICAL PURPOSES

Part 1—CLASSIFICATION AND GENERAL REQUIREMENTS

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The following interests are represented on Committee EL/4:

Association of Consulting Engineers Australia

Australian Electrical and Electronic Manufacturers Association

Confederation of Australian Industries

Department of Defence Support

Department of Housing and Construction

Electrical Contractors Associations of Australia

Electrical regulatory authorities

Electricity Supply Association of Australia

Plastics Institute of Australia Incorporated

Railways of Australia Committee

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In addition, the following interest was represented on the drafting subcommittee responsible for this standard:

Metropolitan Water Sewerage and Drainage Board, Sydney

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AUSTRALIAN STANDARD

SHEETS AND BOARDS FOR ELECTRICAL PURPOSES

Part 1
CLASSIFICATION AND GENERAL REQUIREMENTS

AS 1795, Part 1—1983

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PREFACE

This edition of the standard was prepared by the Association's Committee on Electrical Accessories to supersede AS 1795, Part 1—1979.

The object of this standard is to establish a classification system for different types of panel and to nominate constructional requirements and performance tests. Dimensions of switchboard insulating panels are covered in Part 2.

The classification system used recognizes two types of panel; insulating panels and non-insulating panels. This edition was primarily prepared to specify requirements for non-insulating panels, which were known as mounting panels in the 1979 edition and were shown as 'under consideration'.

In this edition the terms 'laminated' and 'composite' have been deleted from the title used in the 1979 edition, because they were considered too restricting.

The flammability requirements of AS 2420 have been included by way of the glow-wire test and heat-behaviour test, although the heat-behaviour test is shown as under consideration and will be considered for inclusion when finally published as part of AS 2420.

Following the problems that were reported concerning corrosion caused by the presence of d.c. current, a new test has been included to determine the conductivity of the aqueous extract. It is expected that Approvals Authorities will require compliance with this test 12 months from the date of publication.

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colour for switchboards not specified

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard for SHEETS AND BOARDS FOR ELECTRICAL PURPOSES

PART 1—CLASSIFICATION AND GENERAL REQUIREMENTS

SECTION 1. SCOPE AND GENERAL

1.1 SCOPE. This standard specifies requirements for sheets and boards intended for use either as mounting panels for double-insulated equipment or for the insulation of live parts, or both.

NOTES:

1. The sheets and boards collectively are hereinafter referred to as 'electrical panels'.
2. While this standard has been prepared primarily to cover phenolic resin-bonded paper laminated sheets and bitumen-impregnated asbestos cement boards, it is recommended that the relevant requirement of this standard be used in assessing the suitability of electrical panels made from other materials.

This standard does not specify dimensions of electrical panels.

NOTE: For dimensions of switchboard panels, see AS 1795, Part 2.

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

AS 1767	Insulating Oil for Transformers and Switchgear
AS 2420	Fire Test Methods for Solid Insulating Materials and Non-metallic Enclosures Used in Electrical Equipment
AS C329	Method for the Measurement of Voltage with Sphere-gaps (One Sphere Earthed)
BS 46	Keys and Keyways and Taper Pins Part 3—Solid and Split Taper Pins
BS 2067	Determination of Power-factor and Permittivity of Insulating Materials (Hartshorn and Ward Method)
BS 2782	Methods of Testing Plastics Method 205B

1.3 CLASSIFICATION.

1.3.1 General. In accordance with the test requirements of Section 3, electrical panels shall be classified as follows:

(a) *Insulating panels*—when they are intended for the insulation of live parts

(b) *Non-insulating panels*—when they are intended for the mounting or use of double-insulated equipment.

NOTE: Appendix A gives guidance on the selection of electrical panels for various purposes.

1.3.2 Insulating Panels. Insulating panels shall be subdivided into types as follows:

Types 1, 2, 3, 4, 5, X and Z.

1.3.3 Non-insulating Panels. Non-insulating panels shall be subdivided into types as follows:

Types A and B.

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