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Electrical systems in furniture — Specification

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Foreword

Publishing information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 31 March 2022. It was prepared by Technical Committee FW/0, *Office Furniture*. A list of organizations represented on this committee can be obtained on request to the committee manager.

Supersession

This British Standard supersedes BS 6396:2008+A1:2015, which will be withdrawn on 31 March 2023.

Information about this document

This is a full revision of the standard, and introduces the following principal changes:

- clarification of earthing;
- clarification of residual current device (RCD) testing;
- new requirements for battery supply and inverter systems;
- new requirements for luminaires and batteries; and
- addition of ELV outlets in [Clause 5](#).

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Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is “shall”.

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Requirements in this standard are drafted in accordance with *Rules for the structure and drafting of UK standards*, subclause **G.1.1**, which states, “Requirements should be expressed using wording such as “When tested as described in [Annex A](#), the product shall ...”. This means that only those products that are capable of passing the specified test will be deemed to conform to this standard.

Where words have alternative spellings, the preferred spelling of the Shorter Oxford English Dictionary is used (e.g. “organization” rather than “organisation”).

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1 Scope

This British Standard specifies requirements for the provision and assembly of electrical power, data and telecommunications distribution systems in furniture.

Requirements are specified for furniture for general use and also for use with specific equipment, parts of which are potentially built in during manufacture.

NOTE 1 Appropriate tests are described for the installed power distribution system in the furniture.

This British Standard covers furniture incorporating single phase electrical power distribution systems operating at rated voltages up to 250 V a.c. that are either supplied by connection to the fixed wiring of the permanent installation of the building by a 13 A fused plug and socket outlet arrangement conforming to, for plugs, [BS 1363-1](#) and, for socket-outlets, [BS 1363-2](#), and/or derived from batteries at a nominal voltage not exceeding 48 V d.c.

NOTE 2 Provision is made for the routing of cables through the furniture.

This British Standard does not apply to electrical appliances used with or within an article of furniture, for which appropriate standards are available.

NOTE 3 Any power distribution systems that are connected to the building installation by anything other than a 13 A BS 1363 plug or a supply derived from batteries installed within the furniture should follow the requirements of [BS 7671](#).

This British Standard is not applicable to special purpose workstations in laboratories or workshops.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes provisions of this document¹⁾. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

[BS 1362](#), Specification for general purpose use links for domestic and similar purposes (primarily for use in plugs)

[BS 1363-1](#), 13 A plugs, socket-outlets, adaptors and connection units – Part 1: Specification for rewirable and non-rewirable 13 A fused plugs

[BS 1363-2](#), 13 A plugs, socket-outlets, adaptors and connection units – Part 2: Specification for 13 A switched and unswitched socket outlets

[BS 5733](#), Specification for general requirements for electrical accessories

[BS 6004](#), Electric cables – PVC insulated and PVC sheathed cables for voltages up to and including 300/500 V, for electric power and lighting

[BS 7211](#), Electric cables – Thermosetting insulated and thermoplastic sheathed cables for voltages up to and including 450/750 V for electric power and lighting and having low emission of smoke and corrosive gases when affected by fire

[BS 7671:2018](#), Requirements for electrical installations – IET Wiring Regulations

BS EN 50525 (all parts), Electric cables – Low voltage energy cables of rated voltages up to and including 450/750 V (U_0/U)

BS EN 60947-2:2017+A1:2020, Low-voltage switchgear and controlgear – Part 2: Circuit-breakers

¹⁾ Documents that are referred to solely in an informative manner are listed in the Bibliography.