

CP 88 SS 650 : Part 1 : 2001 2019

(ICS 29.260.10)

SINGAPORE STANDARD

Code of practice for temporary electrical installations

– Part 1 : Construction and building sites

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installations**

– Part 1 : Construction and building sites

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Association of Consulting Engineers Singapore

Energy Market Authority

Ministry of Manpower

Ngee Ann Polytechnic

Singapore Electrical Contractors and Licensed Electrical Workers Association

Singapore Electrical Trades Association

Singapore Civil Defence Force

SP Group

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Foreword

This ~~Part of the~~ Singapore Standard ~~CP 88~~ was prepared by the ~~Technical Committee~~ Working Group on Temporary Electrical ~~Installations~~ Installation set up by the Technical Committee on Power System & Utilisation under the ~~direction of the Electrical Industry Practice Committee~~ purview of EESC.

~~It was developed as a result of a review of the Singapore Standard CP 44 : 1988—~~ This is a revision of CP 88 : Part 1 : 2001 – “Code of practice for temporary electrical installations ~~for construction and building sites~~”.

~~This – Part of CP 88 is drawn up to supplement the general requirements of Singapore Standard CP 5—~~ ‘Code of practice for electrical installations’. ~~As installations operating at voltages up to 1000 V 1 : a.c. are widely used in Construction and building sites, it is considered necessary to give guidance on good practice for the inspection, testing and maintenance of such installations. In addition, guidance on the installation of generating set and socket outlet assembly are included to address the common use of generating set and socket outlets for portable tools at these sites”~~ and has been re-designated as SS 650.

~~It is to be noted that for installations where separated extra low voltage (SELV) is used, references shall be made~~ Editorial updates and amendments to the ~~general~~ scope and requirements ~~for~~ of protection ~~by SELV in Singapore Standard CP 5.~~

~~Installations operating at voltages exceeding low voltage are outside~~ for safety have been made. This includes the ~~scope of this Part of the Code~~ list of normative references amended to include the latest SS, IEC or BS accordingly.

~~NOTE—~~ SS 650 comprises the following parts under the general title ‘Code of practice for temporary electrical installations ~~other than that for~~ installations’:

Part 1: Construction and building sites ~~may be covered~~

Part 2: Festive lighting, trade-fairs, mini-fairs and exhibition sites

Generally, the risks of electrical shock are high on construction and building sites because of factors such as:

- Possibility of damages to cables and equipment;
- Wide use of hand tools with trailing leads;
- Accessibility of many extraneous-conductive -parts, which cannot practically be bonded;
- Works are generally open to the environmental conditions.

Users are expected to read this part of the Code in conjunction with the general requirements of SS 638 (formerly CP 5), “Code of practice for electrical installations”. Because of variations ~~in other Parts~~ local circumstances of construction sites, the requirements of this Code are given in general terms, and will normally need to be supplemented by the advice of skilled persons as defined in 3.11.

It is presupposed that in the course of their work, users will comply with all relevant regulatory and statutory requirements. Some examples of relevant regulations and acts are listed in the Bibliography. The Singapore Standards Council and Enterprise Singapore will not be responsible for identifying all of such legal obligations.

In preparing this Code, reference was made to the following publications:

BS 4363:1998+A1:2013	Specification for distribution assemblies for reduced low voltage electricity supplies for construction and building sites
BS 4363:1998+A1:2013	Specification for distribution assemblies for reduced low voltage

BS 4444:1989	Guide to electrical earth monitoring and protective conductor proving
BS 6708:1998	Flexible cables for use at mines and quarries
BS 7375:2010	Code of practice for distribution of electricity on construction and building sites
BS EN 50525-1:2011	Electric cables – Low voltage energy cables of rated voltage up to and including 450/750 V (U0/U) – General requirements
BS EN 50525-2-11:2011	Electric cables – Low voltage energy cables of rated voltage up to and including 450/750 V (U0/U) – Cables for general applications – Flexible cables with thermoplastic PVC insulation
BS EN 50525-2-12:2011	Electric cables – Low voltage energy cables of rated voltage up to and including 450/750 V (U0/U) – Cables for general applications – Cables with thermoplastic PVC insulation for extensible leads
BS EN 50525-2-21:2011	Electric cables – Low voltage energy cables of rated voltage up to and including 450/750 V (U0/U) – Cables for general applications – Flexible cables with crosslinked elastomeric insulation
BS EN 50525-2-71:2011	Electric cables – Low voltage energy cables of rated voltage up to and including 450/750 V (U0/U) – Cables for general applications – Flat tinsel cables (cords) with thermoplastic PVC insulation
IEC 60079-14:2013	Explosive atmospheres – Part 14: Electrical installations design, selection and erection

Permission to reproduce extracts from BS 4444:1989 and BS 7375:2010 was granted by BSI Standards Limited.

Acknowledgement is made for the use of information from the ~~following publications:~~

- ~~AS 2790 : 1989 — Electricity generating sets — Transportable (Up to 25 kW)~~
- ~~AS 3010.1 : 1987 — Electrical installations — Supply by generating set
Part 1 — Internal combustion engine driven set~~
- ~~BS 4363 : 1998 — Specification for assemblies for reduced low voltage electricity supplies for construction and building sites~~
- ~~BS 4444 : 1989 — Guide to electrical earth monitoring and protective conductor proving~~
- ~~BS 5345 : — Code of practice for selection, installation and maintenance of electrical apparatus for use in potentially explosive atmosphere (other than mining applications or explosive processing and manufacture)~~
- ~~BS 6500 : 2000 — Specification for electric cables — Flexible cords rated up to 300/500 V, for use with appliances and equipment intended for domestic, office and similar environments~~
- ~~BS 6708 : 1998 — Flexible cables for use at mines and quarries~~
- ~~BS 7375 : 1996 — Code of practice for distribution of electricity on construction and building sites~~

~~Clauses that are extracted from the above British Standards are given in Annex E. They are reproduced with the permission of British Standards Institution (BSI), publications.~~

Note

- 1. Singapore Standards (SSs) and Technical References (TRs) are reviewed periodically to keep abreast of technical changes, technological developments and industry practices. The changes are documented through the issue of either amendments or revisions.*
- 2. An SS or TR is voluntary in nature except when it is made mandatory by a regulatory authority. It can also be cited in contracts making its application a business necessity. Users are advised to assess and determine whether the SS or TR is suitable for their intended use or purpose. If required, they should refer to the relevant professionals or experts for advice on the use of the document. Enterprise Singapore shall not be liable for any damages whether directly or indirectly suffered by anyone or any organisation as a result of the use of any SS or TR.*
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