

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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*As amended
May 2001*

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Foreword

This Part of the Singapore Standard CP 88 was prepared by the Technical Committee on Temporary Electrical Installations under the direction of the Electrical Industry Practice Committee.

It was developed as a result of a review of the Singapore Standard CP 44 : 1988 – ‘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 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.

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

Installations operating at voltages exceeding low voltage are outside the scope of this Part of the Code.

NOTE – Temporary electrical installations other than that for Construction and Building Sites may be covered in other Parts of this Code.

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).

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.*
- 3. Compliance with a SS or TR does not exempt users from any legal obligations.*

Code of practice for temporary electrical installations – Part 1: Construction and building sites

1 General

1.1 Scope

This Part of the Code of Practice deals principally with temporary electrical installations for building operation and work of engineering construction. It applies to electrical installations set up for the provision of electricity supply during the execution of the following works:

- (a) New building construction;
- (b) Repair, alteration, extension or demolition of buildings;
- (c) Engineering construction;
- (d) Earthworks;
- (e) Other similar works.

The requirements in this Code shall not apply to installations in construction site offices, meeting rooms, canteens, dormitories, toilets, etc., where the general requirements in the Singapore Standard CP 5 shall apply.

Although some temporary installations at these sites may receive supplies at voltages higher than 1000 V, such parts of the installations are outside the scope of this Code.

This Code also does not cover those aspects of installations in compressed air environment and potentially explosive atmospheres.

NOTE – The titles of the publications referred to in this standard are listed at the end of the standard.

1.2 Object

The object of this Part of the Code is to protect persons and property against electrical hazards in the use of electricity in construction sites in view of the arduous duty imposed on the electrical equipment and wiring by the construction site conditions.

The general requirements of Singapore Standard CP5 shall be read in conjunction with this Part of the Code.

Because of variations in 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 2.7.

1.3 Relationship with statutory regulations

This Part of the Code is to be implemented in conjunction with other statutory requirements currently in force in the Republic of Singapore and should there be any conflicting requirements in the Acts and their Regulations, clarification should be obtained from the relevant bodies administering the Acts and Regulations.

All temporary electrical installations for building operation and work of engineering construction are required to be licensed by the Public Utilities Board under the Public Utilities (Licence to Use or Operate Electrical or Supply Installations) Regulations.

1.4 Use of established materials, equipment and methods

Only established materials, equipment and methods are considered, but it is not intended to discourage invention or to exclude other materials, equipment and methods affording an equivalent degree of safety which may be developed in the future.

1.5 New materials and inventions

Where the use of a new material or invention leads to departures from this Part of the Code, the resulting degree of safety of the installation is to be not less than that obtained by compliance with this Part of the Code. Such departure shall be the subject of a written specification of a competent body, or skilled person or persons, and the installation shall be deemed to be outside the scope of this Part of the Code.