

SS 650 : Part 2 : 2019

(ICS 29.260.10)

SINGAPORE STANDARD

Code of practice for temporary electrical installations

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

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The organisations in which the experts of the Working Group are involved are:

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 Singapore Standard was prepared by the Working Group on Temporary Electrical Installation set up by the Technical Committee on Power System & Utilisation under the purview of EESC.

This is a revision of CP 88 : Part 2 : 2001 – “Code of practice for temporary electrical installations – Part 2 : Festive lighting, trade-fairs, mini-fairs and exhibition sites” and has been re-designated as SS 650 : Part 2.

Editorial updates and amendments to the scope and requirements of protection for safety have been made in this revision. This includes the list of normative references amended to include the latest SS, IEC or BS accordingly.

SS 650 comprises the following parts under the general title ‘Code of practice for temporary electrical installations’:

Part 1: Construction and building sites

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

Temporary electrical installations for festive lighting, trade-fairs, mini-fairs and exhibition sites such as bazaar, exposition and decorative lighting installation erected in conjunction with festive, religious or commercial events, are becoming increasingly common. This Code is drawn up to meet these needs and to supplement the general requirements of SS 638 (formerly CP 5), “Code of practice for electrical installations” and includes recommendations with regard to inspection, testing and maintenance. 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 3.9.

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 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 60364-7-740:2000	Electrical installations of buildings, Part 7: Requirements for special installations or locations, Section 740: Temporary electrical installations for structures, amusement devices and booths at fairgrounds, amusement parks and circuses

IEC 60669-1:2017	Switches for household and similar fixed-electrical installations – Part 1: General requirements
IEC 60079-14:2013	Explosive atmospheres – Part 14: Electrical installations design, selection and erection

Acknowledgement is made for the use of information from the above publications.

Attention is drawn to the possibility that some of the elements of this Singapore Standard may be the subject of patent rights. Enterprise Singapore shall not be held responsible for identifying any or all of such patent rights.

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. Where SSs are deemed to be stable, i.e. no foreseeable changes in them, they will be classified as "Mature standards". Mature Standards will not be subject to further review, unless there are requests to review such standards.*
- 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 and the Singapore Standards Council 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. Although care has been taken to draft this standard, users are also advised to ensure that they apply the information after due diligence.*
- 3. Compliance with a SS or TR does not exempt users from any legal obligations*

Code of practice for temporary electrical installations

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

1 Scope

This part of the Code covers installations operating at voltages up to 1000 V for festive lighting, trade-fairs, mini-fairs and exhibition sites and also installations where separated extra low voltage (SELV) is used. It deals principally with outdoor electrical installation set up for the provision of electricity supply for:

- (a) trade-fairs or mini-fairs;
- (b) exhibition;
- (c) amusement park;
- (d) decorative lighting in public place; or
- (e) any outdoor electrical installation set up for festive, religious or commercial events accessible to the public.

It specifies the minimum electrical installation requirements to facilitate the safe design, installation and operation of mobile and temporarily installed electrical machines and structures, which incorporate electrical equipment. The machines and structures are intended to be installed repeatedly, without loss of safety, temporarily or permanently, at fair/exhibition sites, amusement parks or any other similar sites.

This Code does not cover decorative lighting within domestic premises as the requirements are provided by SS 638.

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

Discharge lighting installation operating at high voltage for the purpose of decoration is also outside the scope of this Code.

This Code does not apply to the electrical equipment of machines.

NOTE 1 – For other temporary installations that is not covered above, reference may be made to the relevant clauses of this Part of the Code for general guidance. See example illustrated in 7.2.1.8.

NOTE 2 – Refer to SS 586 for diesel signage to be affixed at generating set installed at site.

2 Normative references

The following referenced documents are indispensable for the application of this Code. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS 559	Specifications for the design and construction of signs for publicity, decorative and general purposes
BS EN 50525-1	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	Electric cables – Low voltage energy cables of rated voltage up to and