

SINGAPORE STANDARD
CP 27 : 1999
(ICS 91.040.20; 91.120; 91.140)

CODE OF PRACTICE FOR
Factory layout – Safety, health
and welfare considerations

(Incorporating Amendment No. 1, October 2001 and
Amendment No. 2, September 2003)

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Head
Standardisation Department
SPRING Singapore
2 Bukit Merah Central
Singapore 159835
Telephone: 62786666 Telefax: 62786667
Email: stn@spring.gov.sg

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Foreword

This Code of Practice was prepared by the Technical Committee on General Safety under the direction of the Industrial Safety Standards Committee. It is a revision of CP 27:1983.

The purpose of this Code is to provide guidelines on safety, health and welfare to be taken into consideration when planning factory layout. In the revision, a new section on ergonomic consideration was added so as to take into account the human factor while planning the factory layout. This new section includes topics such as design in relation to body dimensions, body posture, muscular strength and body movement. This Code is intended for factory occupiers, factory owners, engineers, architects, safety officers, developers and all those concerned directly or indirectly with factory layout.

This Code makes reference to the Code of Practice for Fire Precautions in Buildings, which is mentioned under the Fire Safety Act 1993 and the Fire Safety Regulations 1994 issued by the Singapore Civil Defence Force. *As amended Sep 2003*

In revising this code, references were made to the following publications:

1. BS 1710 : 1984 Identification of pipelines and services
2. ISO 6385 : 1981 Ergonomic principles in the design of work systems
3. ISO 7243 : 1988 Hot environments - Estimation of the heat stress on working man, based on the WBGT - index (wet bulb globe temperature)
4. Draft prEN 12437:1996 Safety of machinery – Permanent means of access to machines and industrial plants
5. SS 364 : 1993 Fire safety signs
6. SS CP 19 : 1991 The installation and maintenance of emergency lighting and power supply systems in buildings
7. SS CP 38 : 1987 Code of practice for artificial lighting in buildings
8. ACGIH 1997 Threshold limit values for chemical and physical agents
9. Code of practice for fire precautions in buildings, 1997
10. Factories Act (Chapter 104)
11. Factories (Noise) Regulation
12. Industrial ventilation : A manual of recommended practice, ACGIH 17th edition

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

NOTE

1. *Singapore Standards are subject to periodic review to keep abreast of technological changes and new technical developments. The revisions of Singapore Standards are announced through the issue of either amendment slips or revised editions.*
2. *Compliance with a Singapore Standard does not exempt users from legal obligations.*

Code of practice for factory layout – Safety, health and welfare considerations

0 Introduction

0.1 Scope

The Code shall apply to all premises which are used or intended to be used as factories. The interpretation of the expression “factory” under the Factories Act (Chapter 104) is given in Annex A.

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

0.2 Purpose

Under section 9 of the Factories Act (Chapter 104) persons who intend to use or occupy any premises as a factory must submit an application for registration of the factory to the Chief Inspector of Factories not less than 2 months before the operation of the factory.

The application for factory registration must be submitted together with a layout plan of the factory. The purpose of this Code is to provide guidelines on the safety, health and welfare considerations to be taken in planning the factory layout. This Code is intended for factory occupiers, factory owners, engineers, architects, safety officers, developers and all those concerned directly or indirectly with factory layout. The procedures for the application of factory registration and guidelines on the submission of factory layout plans are in Annex B.

0.3 “Shall” and “Should”

The provisions of this standard are mandatory in nature where the word “shall” is used and advisory in nature where the word “should” is used.

0.4 Code division

This Code is divided into 4 sections, viz. –

- (a) Section One - Safety considerations;
- (b) Section Two - Health considerations;
- (c) Section Three - Ergonomic considerations; and
- (d) Section Four - Welfare considerations.