SS 652: 2019
(ICS 03.080.10)

SINGAPORE STANDARD Maintainability of facilities





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The Technical Committee sets up the Working Group on Maintainability of Facilities to prepare this standard. The Working Group consists of the following experts who contribute in their *individual capacity*:

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Members : Prof Michael Chew

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Association of Property and Facility Managers
Building and Construction Authority
JTC Corporation
Ministry of Manpower
National Environment Agency
National University of Singapore
Singapore Contractors Association Ltd
Singapore Green Building Council
Singapore Institute of Architects
Singapore Institute of Building Limited

The Institution of Engineers, Singapore

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Foreword

This Singapore Standard was prepared by the Working Group on Maintainability of Facilities set up by the Technical Committee on Building Maintenance and Management under the purview of BCSC.

It aims to enhance high maintainability of facilities through identifying the common maintainability issues and the corresponding provisions for designers, constructors and facilities managers at the outset of the planning/design stage.

Maintainability refers to the ease and ability with which maintenance activities can be carried out. It has begun to receive considerable attention even for projects at their planning stage.

It is recommended that users of this standard refer to the latest edition of the reference standards cited throughout the standard.

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 standard, reference was made to the following publication:

Chew Yit Lin Michael, Ashan Asmone and Sheila Conejos (2018). Design for Maintainability: Benchmarks for Quality Buildings, World Scientific publishing Ltd., Singapore. https://doi.org/10.1142/10722.

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

Attention is drawn to the possibility that some of the elements of this Singapore Standard may be the subject of patent rights. Enterprise Singapore will 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 will 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.

Maintainability of facilities

1 Scope

The standard is intended to provide guidance and methodologies to building and real estate professionals involved in the design, construction and maintenance of a facility¹.

The objectives are as follows:

- a) To enhance high maintainability of facilities through identifying the common maintainability issues and the corresponding requirements for designers, constructors and facilities managers at the outset of the planning/design stage.
- b) To recommend best practices for the respective professionals from design, construction to maintenance stages, in a practical, concerted and conscientious manner towards high maintainability, safety, productivity and environmentally friendly goals.
- c) To inculcate a conscious effort and commitment for all building and real estate professionals to take into consideration the whole life performance and economic value of a facility within the environmental constraints.

The standard identifies common maintainability issues of facilities and recommends the relevant best practices applicable to design, construction and facilities management. Major components of a facility include basements, wet areas, facades, common areas², roofs and mechanical and electrical (M&E) systems.

Actions to be taken in accordance with existing or new standards or requirements that should be considered at the design, construction and maintenance stage are outlined in the respective annexes.

2 Normative references

No normative reference is cited in this standard.