

SINGAPORE STANDARD

Code of practice for building project document control system

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control system**

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Institute of Engineers Singapore
Real Estate Developers Association of Singapore
Singapore Contractors Association Limited
Singapore Institute of Architects
Singapore Institute of Building Limited
Singapore Institute of Surveyors and Valuers
Society of Project Managers

The Technical Committee acknowledges the contributions of the following consultants in preparing this standard:

1. Cyril K H Seah Architects – Mr Cyril Seah and Mr Seah Kwee Yong
2. Deluge Fire Protection (SEA) Pte Ltd – Mr Freddie Quek
3. Engineers 9000 Pte Ltd – Mr Chong Kee Sen

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Foreword

This Code of Practice was prepared by the Technical Committee for Construction Industry IT Standards under the purview of the Information Technology (IT) Standards Committee.

This Code was introduced as there was a need to synchronise building document file names and registers to support document management and workflow software for an integrated/ interoperable Project Planning Control Extranet System.

Local major building developers (like CDL, Far East, Wing Tai, etc), consultants (like DLS, CPG, Surbana, Beca, etc), contractor firms (SembCorp, etc.) and government agencies (HDB, LTA, JTC, etc), have a comprehensive set of Standing or Standard Operating Procedures (SOP) which can be adopted by the consultants, contractors and sub-contractors to facilitate the inter-operational communication. These organisations already have a 'close system', Project Information Document Records and Repository management and workflow setup using various Document Management (DM) tools to manage.

A complete project information is hardly captured and stored centrally. Information gets scattered into multiple files, multiple locations and results in inconsistency and redundancy. This is not only inefficient in the retrieval of information but it also reduces the efficiency for planning future projects.

To synchronise the construction document record in Europe, a set of generic categorisation was jointly developed by the Construction Confederation, the Royal Institute of British Architects, the Royal Institute of Chartered Surveyors, the Chartered Institution of Building Services Engineers and the Department of the Environment Construction Sponsorship Directorate. The UK Unified Classification for the Construction Industry (UniClass) provides a general category numbering in alphanumeric, similar to the Library Catalogue system. Sub-categories are not numbered.

The US have similarly mooted a reference development similar to UniClass. The Overall OmniClass™ Construction Classification System (OCCS) does not codify the master file template, but leaves it to the various commercially available Document Management (DM) tools to manage this.

This Code provides a simpler alternative to the UK and US classification systems.

This Code was prepared with reference to the project file layout of following firms:

1. BEC Consultants
2. Black & Veatch (SEA) Pte Ltd
3. City Developments Ltd
4. Lian Beng Construction (1988) Pte Ltd
5. SembCorp Engineers & Constructors Pte Ltd
6. WEC Engineers & Constructors Pte Ltd
7. Wing Tai Property Management Pte Ltd

In preparing this code, reference was also made to the US Federal Highway Administration (FHWA).

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

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.*
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 building project document control system

0 Introduction

In developing this Code a survey was carried out to identify generic interoperable phrases, a review on the local submission process and a comparison with internationally available standards on the need for index codification.

The survey showed that major developers, consultants and contractors file their project records comprehensively, dividing them into 3 broad stages as shown in Table 1.

Table 1 – Conventional categorisation of building construction project records

Inception and design	Construction	Commission and hand over
Project initiation and budgeting	Budget monitoring	Final accounts
Government permits/ approvals	Government permits/ approvals	Government permits/ approvals
Designs	Programme planning	Commissioning
Specifications	Development records, shop drawings and contractor's submission approvals	Quality control and rectification of defects
Tender invitation and packaging	Operation control and safety	As-built inventory records
Evaluation and awards	Change requests, instructions and directions	Handing over (to facilities management)
Contract closures	Reports, valuation and payments	Project implementation reviews
Minutes of meetings	Minutes of meetings	Minutes of meetings
Correspondence (internal)	Correspondence (internal)	Correspondence (internal)
Correspondence (external)	Correspondence (external)	Correspondence (external)

The Government/ Inspectors' Approvals/ Permits issued electronically or manually include the following:

- a) Development plan and control submission – Development planning approvals, provisional permission, written permission; etc.
- b) Building and construction control submission – Building plan approval, structural plan approval, technical departments' clearance, permit to commence works, fire plan, sewerage, drainage & environmental health, pollution control, road & transport, MRT route protection, vehicle parking, planting, construction of seawall, river wall, and structure within 15 m of the foreshore; utility/ communication licensed providers' approval; etc. Temporary Occupation Permit (TOP), Certificate of Statutory Completion (CSC). CORENET e-submission; e-plan check; electronic buildable-design appraisal; etc.

The functional players include Owner the Employer, Qualified Person (QP), Accredited Checker (AC), the Superintending Officer (SO) i.e. “the Architect” or “the Engineer”, Professional Engineer, Safety Inspector, Contractor and Quality Auditor. The ancillary players include suppliers, testing laboratories, auditors, corporate governors, adjudicators, mediators, lawyers, accountants, financial institution, insurers, government departments, statutory bodies, registration bodies, associations, etc.

1 Scope

This Code establishes a master file template to support Document Management and Workflow software for the developers/ consultants/ contractors and sub-contractors to use concurrently an integrated/ interoperable Project Planning Control Extranet System.

The users of this Code include property developers, architects, mechanical and electrical engineers, civil and structural engineers, quantity surveyors and contractors.