

Construction Industry Council

Way Forward on Construction Standards

(I) Purpose

- This paper sets out the recommendation of the Committee on Environment and Technology (Com E&T) on the way forward on construction standards.

(II) Types of Construction Standards

- Material standards
 - A standard is a document describing the key characteristics of basic materials or processes to facilitate production and choice of supply sources.
 - Standards are usually issued by standards bodies.
 - Examples
 - ASTM C33: concrete aggregates
 - BS812: Testing aggregates

- Specifications

- A specification is a document that specifies the requirements for the materials, workmanship and testing standards for construction works.
- Specifications are usually issued by client organizations stipulating the requirements applicable to their construction contracts and usually refer extensively to material standards to define the requirements for building materials, workmanship and testing.
- Examples
 - General Specification for Civil Engineering Works 2006 edition issued by CEDD

- Code of Practice

- A code of practice is a document that describes the good practices for the design and construction of works.
- Codes of practice may be issued by standard bodies and major client organizations.
- Examples -
 - BS7121: Code of practice for safe use of cranes
 - BS8110: Structural use of concrete

(III) Modus Operandi for Development of Local Standards

(A) Institutional arrangements

- There is no construction standards body in Hong Kong.
- For private building works, BD is mastering the development of design codes and standards in relation to the basic safety and hygiene of private buildings.
- For infrastructure projects and public building projects, the public sector clients (including the works departments under DEVB, HD, MTRC and Airport Authority Hong Kong) had well-established specifications and design codes.

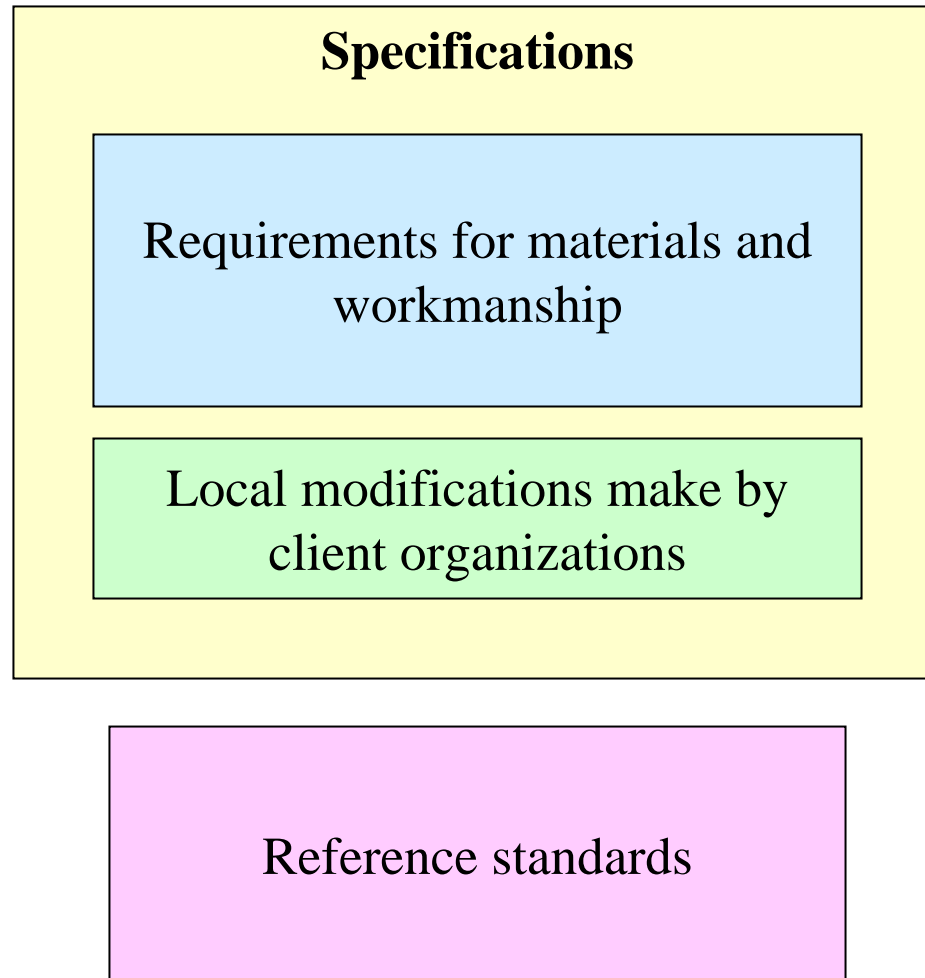
(B) Material standards

- Given the small size of the local construction market and the lack of a manufacturing base, locally developed materials standards are quite rare.

(C) Specifications

- The requirements for materials and workmanship in the specifications of the public sector client organizations are specified mainly by making reference the standards developed by leading standards bodies (in particular the British Standards published by the British Standards Institute (BSI)).
- These specifications usually incorporate modifications to the reference standards to suit local conditions. This structure is illustrated diagrammatically on the following page.

Structure of Typical Local Specifications



(D) Design codes

- The public sector clients publish in-house design codes, design guidelines and design manuals. Like specifications, these codes are based largely on codes issued by leading standard organizations (including BSI) and incorporates modifications to suit local conditions.
- An exception is codes for geotechnical works a fair proportion of which is written locally.

(IV) Possible Initiatives on Construction Standards

- Com E&T considered that a co-ordination mechanism anchored upon CIC should be implemented to facilitate a more concerted approach in the development and improvement of local construction standards.
- The following are the possible initiatives that can be pursued through the mechanism -
 - better alignment of the reference standards and local modifications adopted by the various client organizations in drawing up their specifications to avoid inconsistencies and lower the cost of compliance
 - review of the merits of adopting other standards as alternatives to or replacement of British Standards to take better advantage of the globalisation trend in the procurement of construction materials

- assessment of the impact of the replacement of British Standards by Eurocodes by 2010 on the local construction industry and identifying measures for coping with the change.

(V) Way Forward

- Com E&T proposes to conduct an overall review of local construction standards so as to provide a basis for deliberating on the co-ordination mechanism for construction standards and to entrust the assignment to the following task forces to be formed under Com E&T-
 - Task Force on Construction Standards for Buildings
 - Task Force on Construction Standards for Infrastructures.
- The membership and terms of reference of the task forces are at Annexes A and B respectively.
- The first task force will conduct an overall review of the construction standards used for buildings in Hong Kong, identify the problems and issues associated with the various types of standards, recommend the way forward for tackling them and identify the roles to be played by CIC in the process

- The second task force will conduct a similar exercise for infrastructures.
- The two task forces will focus on specifications for materials and workmanship but will also look at other pertinent aspects of construction standards.
- The task forces are expected to complete the reviews within six months and submit recommendations to Com E&T thereafter.

(VI) Advice Sought

- Members are requested to express their views on the way forward on construction standards and endorse the proposal to form two task forces under Com E&T to conduct an overall review of construction standards used in Hong Kong.



ADVIC PLEASE

Committee on Environment and Technology

Task Force on Construction Standards for Buildings

Chairman – Dr Andrew Chan

Members

- Interested Committee Members
- Representatives of the following organizations –
 - Hong Kong Institute of Architects
 - Hong Kong Institution of Engineers
 - Hong Kong Institute of Surveyors
 - Association of Consulting Engineers of Hong Kong
 - Association of Architectural Practices
 - Hong Kong Construction Association
 - Hong Kong Federation of Electrical and Mechanical Contractors
 - MTR Corporation
 - Architectural Services Department
 - Buildings Department
 - Development Bureau
 - Electrical and Mechanical Services Department
 - Environmental Protection Department
 - Housing Department

Terms of Reference

- (b) to conduct an overall review of the construction standards used for buildings in Hong Kong and identify the problems and issues associated with the various types of standards; and
- (c) to recommend the way forward for tackling these problems and issues and identify the roles to be played by CIC in the process.

Committee on Environment and Technology

Task Force on Construction Standards for Infrastructures

Chairman – Mr Y C Chan (also representing Development Bureau)

Members

- Interested Committee Members
- Representatives of the following organizations –
 - Hong Kong Institution of Engineers
 - Association of Consulting Engineers of Hong Kong
 - Hong Kong Construction Association
 - MTR Corporation
 - Buildings Department
 - Civil Engineering and Development Department
 - Development Bureau
 - Drainage Services Department
 - Environmental Protection Department
 - Highways Department
 - Housing Department
 - Water Supplies Department

Terms of Reference

- (b) to conduct an overall review of the construction standards used for infrastructures in Hong Kong and to identify the problems and issues associated with the various types of standards; and
- (c) to recommend the way forward for tackling these problems and issues and identify the roles to be played by CIC in the process.