<table>
<thead>
<tr>
<th><strong>Title</strong></th>
<th>Construction Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Author(s)</strong></td>
<td>McInnis, JA</td>
</tr>
<tr>
<td><strong>Citation</strong></td>
<td>Asian Architect &amp; Contractor, 1999, v. 28 n. 4, p. 38-39</td>
</tr>
<tr>
<td><strong>Issued Date</strong></td>
<td>1999</td>
</tr>
<tr>
<td><strong>URL</strong></td>
<td><a href="http://hdl.handle.net/10722/57092">http://hdl.handle.net/10722/57092</a></td>
</tr>
<tr>
<td><strong>Rights</strong></td>
<td>This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.</td>
</tr>
</tbody>
</table>
Construction Standards

A new edition of the Construction Standards used in Hong Kong¹ was recently released. This month our regular contributor J.A. McInnis looks at the publication and considers its importance.

Introduction
A contractor's most basic obligation in terms of the standard of work is to comply with the terms of the contract - both express and implied. Very often this obligation is to complete the work to the standards described in the bills of quantities. The bills may refer to codes, standards and specifications. Specifications are documents that, together with the drawings, describe in detail the whole of the workmanship and materials to be used in the construction process. Typically, specifications refer to the physical construction or building itself although they could equally refer, for instance, to the financial parameters for a project as well. Specifications are usually described as either: a) traditional or complete; or b) performance. Traditional specifications in mandatory language set out how a particular activity is to be accomplished, referring to materials and workmanship. Performance specifications, on the other hand, set out a standard that is to be achieved in the work, or the criteria for achieving it. Performance specifications have increased in both use and importance in Hong Kong since the passage of the Building (Construction) Regulations in 1990.

Specifications and Standards
Specifications normally follow a set format that may include the tender, preliminary clauses, trades clauses, schedules and payment. The preliminaries refer to matters preparatory to the work or in relation to the administration of the work, e.g. security and guarding on the site. The preliminaries may supplement the general or special conditions in this regard but, as a rule, will not contradict either of them. The trade clauses contain the details of each specification in relation to the individual item of work, which are completed by reference, for instance, to the General Specification for Civil Engineering Works (1992 Edition) (Hong Kong Government) as amended². This Specification is published in three volumes and was produced by the Standards Unit of the Civil Engineering Department or CED. In general, it prescribes the quality of materials, the standards of workmanship, the testing methods and the acceptance criteria for civil engineering works undertaken for the Hong Kong Government. Within the CED itself the Geotechnical Engineering Office, or GEO, is also involved in a wide range of geotechnical engineering activities pertaining to the safe and economic utilisation and development of land. The GEO and CED together produce a wide variety of manuals, guides and reports for industry.

Specifications will be directed to the main contractor and perhaps through him to subcontractors or specialist tradesmen. When the bill of quantities forms part of the contract documents, specifications will serve moreover as an aid to the contractor. In a contract devoid of bills, specifications can become an important contract document in them. However, their effect will depend upon the express terms of the contract. Thus, for example, under the JCT 1963 Form, and by analogy under the HKIA and RICS forms, clause 12(1) has been construed to preclude a performance specification in the bills of quantities imposing design liability upon the contractor.³ At the tender stage, the specifications will assist the consultant in preparing the bills of quantities. Specifications may be amended or varied during the project for countless reasons. In fact, the architect is under an obligation to stay abreast of changes in the industry that can affect specifications.⁴ The meaning to be given to, and effect of, specifications in both supply and service contracts can be the subject of dispute and, in the sale of goods context, can entitle a party to remedies for breach.⁵

The New Construction Standards
The New Construction Standards are now in their third edition. The Construction Standards Committee of the Construction Advisory Board Works Bureau compiles them. The first edition was released in 1993 and the second in 1996. The Construction Standards Committee is under the chairmanship of Dr Nicky N K Chan who draws upon a wide membership from government departments, professional institutions and trade associations to make up the Committee. The Committee is engaged in both promoting standardisation as well as ensuring that local conditions are taken into account. In 1997 the Committee also released its first edition of an English-Chinese Glossary of Terms Commonly used in the Hong Kong Construction Industry. Since 1997 the Committee has also been working on improving links with Chinese organisations including the Department of Standards and Norms at the Ministry of Construction and the China Association for Engineering Construction Standardisation. The third edition expands the number of standards catalogued and user organisations. Some new users include the Airport Authority, Mass Transit Railway Corp, Hong Kong Electric, Hong Kong Telecom and the Hong Kong and China Gas Company. The number of user organisations is diverse and includes both domestic and international users. The standards are arranged into relevant groups and subgroups.
Overall some 20 groups and 136 subgroups are included in the standards. Each group and subgroup is then cross-referenced in a table to an appropriate standard number, year, title, user organisation and type. The standard numbers still refer for the most part in many cases to the familiar "British Standard" designation rather than to other standards such as the "Australian Standard" or AS designation. Some subgroups can be seen to have been the subject of international harmonisation through either the "International Organisation for Standardisation" or ISO designations, or even the "European Standard" or EN. It is more likely in these latter cases that these standards will be of more recent origin. The year column indicates when the standard was first released but may also indicate the year in which it was most recently reviewed and confirmed. The type of standard is broadly divided into two major categories: technical regulations, which must be complied with, and standards that need not be complied with. The standards themselves are further sub-divided into five categories comprising products, processes, services, testing and others. Most interestingly, the third edition is now available on the Internet through the Works Bureau homepage at http://www.wb.gov.hk Intrepid web surfers will even be able to browse for standards using a construction standard search form. This form is available at http://www.wb.wpelb.gov.hk/ constconst.htm Searches may thus be conducted under subgroup, number, year, title or department.

The Importance of Standards
The collections of standards referred to, coming from codes, regulations, associations and otherwise, are exceedingly important to local industry. They provide both the link to international best practice norms and the touchstone for local conditions. Over the years, standards have evolved and been adopted as law in many of our regulations passed under local ordinances. The codes and standards referred to in the regulations or independently will be written by experts and routinely revised to take into account changing conditions and technological developments. Countless organisations, many of them in Hong Kong, have been involved in this process. The Construction Standards Committee, through the standards it sanctions, makes a major contribution to local uniformity in quality, testing, composition, installation, assembly and methods of construction.

2 There have been some 8 amendments to the Specifications since 1992.
3 John Mowlem & Co v British Insulated Callenders Pension Trust Ltd (1977) 3 Con LR 64.
5 See Lo Kwok Hung (via Gar Wing Hung Kee Construction Co) v Lee Shu Sum and Wong Hung Too (both v/ta Hung Too Quarry Co) No A3183 of 1985, unreported (HC); and Paul Y Construction Co Ltd v Tsui Sui Fui (v/ta Hokkaido Trading & Construction Co) No 115 of 1976, unreported (HC).

J A McInnis is an Associate Professor of Law at the Faculty of Law at the University of Hong Kong and is the author of Hong Kong Construction Law.