

31 October 2011

To: All Authorized Persons
Registered Structural Engineers
Registered Geotechnical Engineers
Registered General Building Contractors
Registered Specialist Contractors and
Registered Minor Works Contractors

Dear Sir/Madam,

Code of Practice for the Structural Use of Steel 2011

With a view to enhancing the structural performance and safety of buildings and to keeping abreast with the development in design and technology on the structural use of steel, the Code of Practice for the Structural Use of Steel 2005 (the 2005 Code) was issued by the Buildings Department (BD) in August 2005. Since then, the BD has received enquiries from practitioners of the construction industry from time to time concerning the use of the 2005 Code.

To respond to the aspiration of the construction industry, a technical committee was set up in February 2008 to review the 2005 Code by collecting views and feedbacks from the construction industry, and to refine and update the contents thereof. As a result, I am pleased to issue the Code of Practice for the Structural Use of Steel 2011 (the 2011 Code) to replace the 2005 Code. The 2011 Code may be used with immediate effect.

New Features of the 2011 Code

The 2011 Code is issued after review and consideration on the latest design and technology of steel construction by the technical committee mentioned above. It provides an up-to-date reference for practitioners of the construction industry.

New features of the 2011 Code include:

- (a) The horizontal drift at top of a single storey portal not supporting human is to be designed to suit the cladding design (section 5.2).
- (b) The deflection method in calculating the elastic critical load factor is clarified to limit the scope of use to geometrically regular and rectilinear frame subjected to gravitational load (section 6.3.2).

- (c) A new buckling curve a_0 is introduced for hollow sections with steel grade higher than S460 or hot-finished seamless hollow sections (section 6.4.3). Table 8.8(a₀) is added.
- (d) Section 11 is revamped to incorporate new features such as cold-formed hollow section and cold-formed sheet pile section. Clauses 11.1 – 11.6 are meant for use of cold-formed thin gauge section with nominal thickness up to 4 mm.
- (e) The performance requirements for structures under fire exposure are succinctly stipulated (section 12.5).
- (f) The equation for the vertical acceleration calculation of a simply supported beam is deleted and reference should be made to appropriate design guidelines (section 13.6.4).
- (g) The references in Annexes A1 & A2 are generally updated to tally with current version. New reference standards are also added.

Application of the 2011 Code

The 2011 Code provides full guidance on how the relevant requirements of the Buildings Ordinance may be complied with.

In order to enable a smooth transition from the 2005 Code to the 2011 Code, a 1-year transition period is allowed. Commencing from 1 November 2012, the BD will only accept structural submissions designed to the 2011 Code when approval under the Buildings Ordinance is to be given.

However, for new building development or alteration and addition (A&A) proposal, if the application for approval of the structural plans or foundation plans was made on or before 1 November 2012, the design in any subsequent structural plan submissions may continue to adopt the code used in the original application.

Access of the 2011 Code

The 2011 Code is available for viewing in the BD website <http://www.bd.gov.hk> under the "Codes of Practice and Design Manuals" page of the "Publications" section. The document may be downloaded subject to the terms and conditions stipulated in the website.

Yours faithfully,



(AU Choi-kai)
Building Authority