

**Structural Steel Cantilevered Structures for External Use
(such as canopy, signboard, curtain wall etc. with cantilevered elements)**

In giving this approval of plans, I hereby impose the following conditions under item 6 in section 17(1) of the Buildings Ordinance:

- (a) For welding of structural steel works, welding procedures and welders should be assessed/tested in accordance with the appropriate provisions of the Annex A to the Code of Practice for the Structural Use of Steel 2011.
- (b) Non-destructive tests are required to be carried out to ALL welded joints at the supports of all cantilevered structural elements to verify the integrity and adequacy of the welds. Testing should be carried out by a laboratory* accredited under the Hong Kong Laboratory Accreditation Scheme (HOKLAS) or by other laboratory accreditation bodies which have reached mutual recognition agreements/arrangements with HOKLAS for the particular test concerned. The test results[@] should be submitted within 21 days after testing and appended with a statement signed by the Registered Structural Engineer to confirm that the tests are carried out in accordance with the appropriate provisions of the Code of Practice for the Structural Use of Steel 2011.
- (c) For welded joints at other locations, non-destructive testing of welds should be carried out in accordance with the appropriate provisions of the Code of Practice for the Structural Use of Steel 2011 and by a laboratory* accredited under HOKLAS or by other laboratory accreditation bodies which have reached mutual recognition agreements/arrangements with HOKLAS for the particular test concerned. The test reports[@] shall be endorsed by Registered Structural Engineer and kept on site for inspection by representatives of the Buildings Department.

2. The following conditions in respect of qualified supervision of works are imposed under item 6 in section 17(1) of the Buildings Ordinance:

- (a) Qualified site supervision of the structural steel cantilevered structure works, including fabrication, erection and examination of the structural elements/fixings, by experienced and competent persons as defined in (b) and (c), should be provided to ensure that the works are carried out in accordance with the plans approved and that the required standards are complied with.
- (b) The Registered Structural Engineer should assign a quality control supervisor to supervise the works, determine the necessary frequency of inspection by the quality control supervisor which should not be less than once a week, and devise inspection check lists. The minimum qualifications and experience of the quality control supervisor is to be the same as the Technically Competent Person of grade T3 under the Registered Structural Engineer's stream, as stipulated in the Code of Practice for Site Supervision 2009.
- (c) The Registered General Building Contractor should assign a quality control co-ordinator to provide full time on site supervision of the works and devise inspection check lists. The minimum qualifications and experience of the

quality control co-ordinator is to be the same as the Technically Competent Person of grade T1 under the Registered General Building Contractor's/Registered Specialist Contractor's stream, as stipulated in the Code of Practice for Site Supervision 2009.

- (d) The names and qualifications of the supervisory personnel representing the Registered Structural Engineer and the Registered General Building Contractor respectively should be recorded in an inspection log book. The date, time, items inspected and inspection results should be clearly recorded in the log book. The log book should be kept on site for inspection by representatives of the Buildings Department.

- 3. Under Building (Administration) Regulation 10, the following documents are required to be submitted for structural steel of Classes 1, 2 or 1H classified in accordance with the Code of Practice for the Structural Use of Steel 2011:

A copy of mill certificates of the structural steel used, which should be appended with a statement signed by the Registered Structural Engineer and submitted within 60 days of the delivery of the structural steel to the site to confirm that the requirements of chemical composition and mechanical properties appropriate to the class and grade of steel have been complied with and the structural steel used is produced from a manufacturer with an acceptable Quality Assurance system.

- 4. Where structural steel of Classes 2, 3 or 1H is used, the following conditions are imposed under item 6 in section 17(1) of the Buildings Ordinance:

Sampling and testing of structural steel should be carried out in accordance with Annex D to the Code of Practice for the Structural Use of Steel 2011. Testing should be carried out by a laboratory* accredited under HOKLAS or by other laboratory accreditation bodies which have reached mutual recognition agreements/arrangements with HOKLAS for the particular test concerned. The test results[@] should be appended with a statement signed by the Registered Structural Engineer and submitted within 60 days of the delivery of the structural steel to the site for confirmation of the followings:

- (i) All structural steel used for the construction and the test specimens covered by the test reports are in accordance with the classes and grades of steel shown in the approved plans.
- (ii) Sampling and testing of structural steel used have been carried out in accordance with the Code of Practice for the Structural Use of Steel 2011.
- (iii) The acceptance criteria appropriate to each class and grade of steel used have been complied with.
- (iv) Testing of steel has been carried out by a laboratory* accredited under HOKLAS or by other laboratory accreditation bodies which have reached mutual recognition agreements/arrangements with HOKLAS.

- * A Directory of Accredited Laboratories in Hong Kong is obtainable from the Hong Kong Accreditation Service (HKAS) Executive, Innovation and Technology Commission.

A laboratory's accreditation for an individual test or calibration may be granted, modified or withdrawn at any time. Up-to-date information on accredited laboratories and their scopes of accreditation are available on the internet at the HKAS website at <http://www.itc.gov.hk/hkas/>.

- @ The test carried out by an accredited laboratory should be within its scope of accreditation. To ensure this, test results should be reported on a HOKLAS Endorsed Certificate or equivalent Certificate/Report issued from other laboratory accreditation bodies which have reached mutual recognition agreements/arrangements with HOKLAS.