

Structural Steel Works

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

- (a) For welding of structural steel works, welding procedures and qualified welders should be assessed/tested in accordance with the appropriate provisions of the Annex A to the Code of Practice (CoP) for the Structural Use of Steel 2011 (2023 Edition).
- (b) For fabrication of structural steel works involving mechanised or automatic welding, the qualified welding operator should be assessed/tested in accordance with BS EN ISO 14732, by an inspection body (IB)* accredited under Hong Kong Inspection Body Accreditation Scheme (HKIAS) or by other IB accreditation bodies which have reached mutual recognition agreements/arrangements with Hong Kong Accreditation Service (HKAS).
- (c) Non-destructive testing of welds should be carried out in accordance with the appropriate provisions of the CoP for the Structural Use of Steel 2011 (2023 Edition) and 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 reports[@], including those for the works at off-site fabrication factory, shall be endorsed by registered structural engineer (RSE) and kept on site for inspection by representatives of the Buildings Department (BD).

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

- (a) Qualified site supervision of the structural steel works, including fabrication, erection and examination of the structural elements, 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 RSE should assign a quality control supervisor (QCS) to supervise the works, including off-site fabrication. The RSE should devise inspection check lists and determine the necessary frequency of inspection by the QCS which should not be less than once a week. The minimum qualifications and experience of the QCS are to be the same as the technically competent person (TCP) of grade T3 under the RSE's stream, as stipulated in the CoP for Site Supervision 2009 (2021 Edition).
- (c) The registered general building contractor (RGBC)/registered specialist contractor (RSC) should assign a quality control co-ordinator (QCC) to provide full-time inspection of the works, including off-site fabrication. The authorized signatory (AS) of the RGBC/RSC should devise inspection check lists. The minimum qualifications and experience of the QCC are to be the same as the TCP of grade T1 under the RGBC's/RSC's stream, as stipulated in the CoP for Site Supervision 2009 (2021 Edition).

/(d) ...

- (d) The names and qualifications of the QCS and QCC assigned by the RSE and the RGBC/RSC respectively should be recorded in their respective inspection log books**. The date, time, items inspected and inspection results should be clearly recorded in the log books by the QCS and QCC. The log books should be kept on site^ and, when required, produced to officers of BD for inspection.

#3. Under regulation 10 of the Building (Administration) Regulations (B(A)R), the following documents are required to be submitted for structural steel of Classes 1, 2 or 1H classified in accordance with the CoP for the Structural Use of Steel 2011 (2023 Edition):

A copy of mill certificates of the structural steel used, which should be submitted within 60 days of the delivery of the structural steel to the site and appended with a statement signed by the RSE 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 BO:

Sampling and testing of structural steel should be carried out in accordance with Annex D to the CoP for the Structural Use of Steel 2011 (2023 Edition). 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 RSE and submitted within 60 days of the delivery of the structural steel to the site for confirmation of the followings:

- (a) 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.
- (b) Sampling and testing of structural steel used have been carried out in accordance with the CoP for the Structural Use of Steel 2011 (2023 Edition).
- (c) The acceptance criteria appropriate to each class and grade of steel used have been complied with.
- (d) 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.

5. Where structural steel works are fabricated/assembled by an off-site fabrication factory, the following condition is imposed under item 6 in section 17(1) of the BO:

- (a) The fabrication factory should have ISO 9001 or equivalent quality assurance certification.

6. Where structural steel works are fabricated/assembled by an off-site fabrication factory, the following documents should be submitted under regulation 10 of the B(A)R:

/(a) ...

- (a) A copy of the quality assurance scheme (QAS) of the manufacturer should be submitted at least 14 days before the commencement of the fabrication/assembling in the factory. Such submission should be prepared in accordance with Sections 9, 14 and 15 of the CoP for the Structural Use of Steel 2011 (2023 Edition) appended with a statement signed by the RSE to confirm that the scheme has adequate provisions in ensuring the quality of the structural steel works are in compliance with the provisions of the BO and in accordance with the plans approved.
- (b) A copy of off-site fabrication supervision plan** containing the names and qualifications of the QCS and QCC assigned by the RSE and the RGBC/RSC respectively should be submitted at least 14 days before the commencement of the fabrication/assembling in the factory.

7. Your attention is drawn to the circular letter dated 15 December 2023 regarding the alternative arrangement of qualified supervision by QCS for simple structural steel elements.

^ Where structural steel works are fabricated/assembled by an off-site fabrication factory, the log books should be kept in the factory and a copy of which should be kept at the building site office.

Delete wherever inapplicable.

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

A laboratory/IB's accreditation for an individual test or calibration may be granted, modified or withdrawn at any time. Up-to-date information on accredited laboratories/IBs 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 the HOKLAS.

** For the Personal Data contained in the documents/reports mentioned in this Appendix

Purposes of Collection

- (i) The personal data provided will be used by the BD for the following purposes:
 - (a) activities relating to the processing of the submission;
 - (b) activities relating to works specified in this appendix; and
 - (c) facilitating communication between the BD and the related personnel.

/Classes ...

Classes of Transferees

- (ii) The personal data provided may be disclosed to:
 - (a) other Government departments, bureaux & relevant organisations for the purposes mentioned in paragraph (i) above; and
 - (b) any person for the purpose mentioned in paragraph (i)(b) above.

Access to Personal Data

- (iii) Data subject has a right of access and correction with respect to personal data as provided for in sections 18 and 22 and principle 6 of Schedule 1 of the Personal Data (Privacy) Ordinance. Data subject's right of access includes the right to obtain a copy of his/her personal data provided by authorized person (AP)/RSE's submission.

Responsibility of AP/RSE

- (iv) AP/RSE should be responsible for disseminating of the above information to the relevant data subjects.