

TASKS OF ACCREDITED CHECKERS FOR STRUCTURAL WORKS IN BUILDINGS

The Accredited Checker for Structural works in Buildings shall check on the design intent of the Consultant's structural design with particular reference to the technical adequacy, constructability, long-term serviceability, and compliance to the legislation, acceptable codes of practice, standards and approved design guides.

The tasks for the Accredited Checkers shall include, but not limited to the following:

- (a) Check on the use the relevant Codes of Practices in the preparation of the structural design in the plans of the building works including its substructure and foundation.
- (b) Check the standards and specifications of materials to be used in the building works including its substructure and foundations.
- (c) Check the design loading for both gravity loads and lateral loads acting on the structure.
- (d) Ascertain the structural design concept adopted including its substructure and foundation and identify the key structural elements to be checked.
- (e) Verify that the key elements of the structure including its substructure and foundation, which are being designed, are consistent with the layout as shown in the latest building plans and any amendments thereto.
- (f) Perform independent calculations with the view to determining the adequacy of the key structural elements of the building, including its substructure and its foundation to be erected in accordance with the structural plans submitted to the Approving Authorities. If calculations on analysis and elemental design are done with the aid of engineering software, the design assumptions, and limitations of such software should be ascertained and stated. The design parameters, which are the computer input, should be mentioned.
- (g) Check that the stability of the structural system is ensured by proper design against the lateral loads in compliance with the relevant codes of practice. For tall and slender structures, determine the necessity for a dynamic analysis for wind loads and seismic loads where applicable.
- (h) Check that the structural design detailing including its substructure and foundation is in compliance with the design intent and is in accordance with good engineering practice.

- (i) Check all key structural elements of the building to be erected and ensure that their design intents are in place and are not affected by the construction works being carried out in accordance with the plans.
- (j) Check the adequacy of other aspects of the design which are peculiar to the building to be erected or affected by the building works and which are essential to the structural integrity of the building.
- (k) Check the structural design of the proposed temporary work where it is to be executed for the substructure works and its foundation to ensure that it is practically viable and potential damages to adjoining properties during the construction of the proposed building are minimized and is not endangering public safety.

In carrying out the task, the AC shall ensure that there is coordination with interfacing elements between the building structure and the geotechnical works.