



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB 50755-2012

**Code for Construction of Steel Structures
(English Translation)**

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1 General Provisions
1.0.1 This Code is formulated with a view to implementing the national technical

1.0.1 This Code is formulated with a view to implementing the national technical

and economic policies in the construction of steel structures and achieving safety and usability, guaranteed quality, advanced technology, and economy and rationality.

1.0.2 This Code is applicable to construction of steel structures in industrial and civil buildings and structures.

1.0.3 The construction of steel structures shall be carried out according to those specified in this Code and quality acceptance shall be carried out for it according to the current national standards of "Unified Standard for Constructional Quality Acceptance of Building Engineering" (GB 50300) and "Code for Acceptance of Construction Quality of Steel Structures" (GB 50205).

1.0.4 The construction of steel structures shall not only meet the requirements of this Code, but also comply with those in the current relevant standards of the nation.

2.1.1 Design document

A general term for such technical documents as design drawing, design instruction and design change completed by the design organization.

2.1.2 Design drawing

The technical drawing prepared by the design organization as the engineering construction basis.

2.1.5 Temporary measure

Some necessary structures or temporary parts and member bars, such as lifting hole, connecting plate and auxiliary member that are arranged with a view to meeting the construction demands and guaranteeing engineering safety during the construction period.

2.1.12 Test assembling

The test assembling carried out in advance to inspect whether the shape and dimension of the member meet the quality requirements.

2.1.13 Ambient temperature

The temperature at the site during the fabrication or installation

3 Basic Requirements

3.0.1

The construction organization of steel structures shall have corresponding construction qualification as well as safety, quality and environmental management system.

3.0.2 Before the construction of the steel structures, technical documents such

as construction organization design and its supporting specific construction plan approved by the technical principal of the construction organization shall be provided and submitted to the supervision engineer or the Owner's representative according to the relevant requirements; experts shall be organized to review the technical plan and safety emergency plan for the construction of important steel structures.

3.0.7 For the construction of steel structures, quality process control shall be carried out according to the following requirements.

4.1.1 This Chapter is applicable to the design of steel structure construction

stage, including structure analysis and checking, design for the preset structure deformation and detail drawing design.

4.2.1 When the construction method or sequence of steel structures has larger

influence on their internal force and deformation or special requirements are made in the design documents, the structure analysis of construction stage shall be carried out;

4.3.1 During the normal use or in the construction stage, when any deformation

due to the deadweight and other load action exceeds the limit specified in the design documents or current relevant standards of the nation or preset deformation requirements are made for the major structure in the design documents, preset deformation shall be adopted for the structure during the construction period.

4.4 Detail Design

4.4.1

The detail drawing for construction of steel structures shall be prepared according to structure design documents and relevant technical documents and shall be confirmed by the original design organization; where the connection design is necessary, the connection design document also shall be confirmed by the original design organization.

4.4.2

The detail design of steel structures shall meet relevant technical requirements such as construction structures, construction process and member transportation.

4.4.3

The detail drawing for construction of steel structures shall include drawing list, general design description, member layout, detail drawing for the member and connection installation etc.

4.4.4

The member weight shall be calculated and listed in the detail drawing for construction of steel structures;

5.1 General Requirements

5.1.1

This Chapter is applicable to ordering, site acceptance, re-inspection and storage management of steel structure materials.

5.1.2

Materials used in the steel structures shall meet the requirements of design documents and current relevant standards of the nation;

5.2 Steel Materials

5.2.1

When the steel materials are ordered, the variety, specification and performance shall meet the requirements of the design documents and current standards of the nation with regard to steel materials; the standards of common steel products should be adopted according to those specified in Table 5.2.1.

5.2.3

The site acceptance for the steel materials shall not only meet those

5.2.4

The re-inspection for the steel materials shall cover the mechanical performance test and chemical composition analysis;

5.3 Welding Materials

5.3.1

The variety, specification and performance of welding materials shall meet the requirements of the current relevant product standards of the nation and the design requirements.

5.5 Steel Castings, Anchorages and Pins

5.5.1

Casting materials selected for the steel castings shall meet the requirements of the standards listed in Table 5.5.1 and the design document.

5.5.2

The prestress steel structure anchorages shall be selected according to the variety, anchorage requirements and pretension process etc.;

5.5.3

The specification and performance of the pins shall meet the relevant requirements of the design document and the current national standard "Clevis Pin with Head" (GB/T 882).

5.7 Material Storage

5.7.1

Specified person, who should take the enterprise training, shall be assigned to be in charge