



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

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**Code for quality acceptance of concrete structure construction
(English Translation)**

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Wording Explanation in This Code

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1 General Provisions

1.0.1 This code is developed in order to strengthen the construction engineering quality

1.0.1 This code is developed in order to strengthen the construction engineering quality

management, unify acceptance of concrete structure engineering construction quality and guarantee project construction quality.

1.0.2 This code is applicable to construction quality acceptance of concrete structure.

1.0.3 Quality acceptance of concrete structure construction shall not only comply with those

specified in this code, but also comply with those in the current relevant national standards.

2.0.1 Concrete structure

The structure mainly made of concrete, including plain concrete structure, reinforced concrete structure and prestressed concrete structure, which may be classified into cast-in-situ concrete structure and precast concrete structure according to the construction method.

2.0.2 Cast-in-situ concrete structure

The concrete structure is made by erecting formwork in situ and integral casting, hereinafter referred to as cast-in-situ structure.

2.0.3 Precast concrete structure

The concrete structure is made by assembling and connecting the precast concrete members or parts, hereinafter referred to as precast structure.

2.0.7 Inspection

Activity in which the features and performances of the inspected item are determined, inspected and tested, and the results are compared with the requirements specified in standards so as to verify the acceptance of each performance.

2.0.8 Inspection lot

The inspection body summarized according to the same production conditions or provisions for the sampling inspection and comprising of certain quantity of samples.

3.0.1 Concrete structure, as sub-subsection project, may be classified into subitem projects

of formwork, steel bar, prestress, concrete, cast-in-situ structure and precast structure. Each subitem project may be classified into several inspection lots according to approaching lots, shift, storey, structural joint or construction section in the principle of consistence with production and construction mode and being convenient for construction quality control.

3.0.5 The sampling shall be carried out randomly in inspection lot and distributed evenly and typically.

3.0.6 Treatment of ineligible inspection lot shall meet the following requirements.

3.0.7 The certified products or the products with stable source and which are eligible upon inspection only once in continuous three lots may be allowed to expand to be double of the capacity of inspection lot at site inspection according to the relevant requirements of this code and the capacity can be doubled only.

3.0.8 Materials, members and accessories, appliance and semi-finished products applied in concrete structure engineering shall be inspected according to the lot number on site.

4.1.1 Formwork shall be prepared with a construction scheme. Technology demonstration

shall be carried out for the special construction schemes of creeping formwork, tool-type formwork and tall formwork support.

4.2 Formwork Installation Dominant items

4.2.1

Technical index of formwork and support materials shall comply with the requirements of current relevant standards of the Nation. The formwork and support materials shall be sampled for inspection over the appearance, specification and dimension when entering into the site.

4.2.3

Formwork and support of post-cast strip shall be arranged separately.

Inspection quantity. 100% inspection.

Inspection method. observing.

4.2.5

Formwork installation shall meet the following requirements.

4.2.6

Release agent shall comply with the construction scheme in the variety and application methods and it shall not influence the structural performance and decoration construction or contaminate the joints where steel bar, prestressed bar are embedded parts are concreted or pollute the environment.

5.1 General Requirement

5.1.1

Acceptance of concealed work shall be performed before concreting, covering.

5.2 Materials

Dominant Items

5.2.1

Where steel bars approach the site, test pieces shall be sampled for yield strength, tensile strength, elongation percentage, bending properties and weight deviation according to relevant current standards of the nation, and inspection results shall meet those specified in corresponding standards.

5.2.2 Where fabricated steel bars approach the site, test pieces shall be sampled for yield

strength, tensile strength, elongation percentage and weight deviation and inspection results shall meet the requirements of current relevant standards of the Nation.

As for the fabricated steel bars made of hot-rolled steel bar, only weight deviation inspection may be carried out when the representatives of constructor or supervisor monitor the production on the site and provide third party inspection reports of mechanical performance for raw material steel bar.

5.3 Steel Bar Processing

Dominant Items

5.3.1

Inside diameter of arc of bent steel bar shall meet the following requirements.

5.3.3

The terminal of stirrup and lacing bar shall be made into hooks according to the design requirements and the following requirements.

5.3.4 Coil steel bar, after being straightened, shall be subjected to mechanical performance

and weight deviation inspection and its strength shall comply with the requirements of current relevant standards of the Nation and its percentage elongation after fracture and weight deviation shall be in accordance with those specified in Table 5.3.4.

5.4.4 The position of steel bar joints shall meet design and construction scheme requirements. As for structures provided with seismic fortification requirements, splicing of steel bars shall not be carried out within the scope of beam end, column end and stirrup densified area. The distance from the joint terminal to the bending starting-point of the steel bar shall not be less than 10 times the steel bar diameter.