



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

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Code for Construction of Steel-Concrete Composite Structures

组合结构通用规范

(English Translation)

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1 General

1.0.1

This Code is formulated, aiming to ensure the quality and safety of composite structure projects, promote the promotion and application of composite structures, protect the ecological environment, ensure the safety of people's lives and property and personal health, and improve the level of green development of composite structure projects.

1.0.2

The composite structure projects must implement this Code.

1.0.3 Whether the technical methods and measures adopted in the project construction

meet the requirements of this Code shall be determined by the relevant responsible entities. Among them, innovative technical methods and measures shall be demonstrated and meet the relevant performance requirements in this Code.

2 Basic Provisions

2.0.1

The safety level of composite structures and members shall be no lower than

Class-II. When the safety level of the composite structure and the member is inconsistent, it shall be clearly marked in the design document.

2.0.2

The design working life of the composite structure shall meet the following requirements.

2.0.3

Within the design working life, the performance of the composite structure shall meet the following requirements.

2.0.4

Within the design working life, measures shall be taken to ensure the safe use of the composite structure and members, and shall meet the following requirements.

3.1 Steel and reinforcement

3.1.1

The steel for composite structure shall meet the following requirements.

3.1.2

Reinforcing bars for composite structure shall meet the following requirements.

3.2 Concrete

3.2.1

The concrete used in the composite structure shall meet the following requirements.

3.3.1 The wood, bonding materials and supporting materials in the composite structure

shall meet the following requirements.

3.4 Fibre reinforced composite materials

3.4.1

Fibre-reinforced composite materials for composite structures shall meet the following requirements.

4.1 General rules

4.1.1

The design of the composite structure system shall consider the impact of the difference in the properties of different materials, and shall meet the following requirements.

4.1.2

When designing composite structures and members, priority shall be given to structures, members and joints that are simple in structure, convenient in construction, and in line with the requirements of industrialized construction.

4.2.1 The analysis and calculation model of the building composite structure system

shall simulate the characteristics of the cooperative force when different materials, members or systems are combined.

4.2.4 For high-rise buildings of a combined structure with a height greater than 150m, they shall meet the requirements for wind-vibration comfort. Under the action of the

10-year wind load standard value, the maximum acceleration limit of the downwind and across-wind vibration of the structure apex shall meet the requirements of Table

4.2.4.

4.2.5 When designing in the normal service limit state, the steel-concrete composite

Acceleration limitUse function

4.3 Bridge structure system

4.3.1

The bridge structure shall be checked against overturning as a whole; and reliable connection construction measures shall be provided between the main beam, cap beam, and pier columns to prevent falling beams and overturning, etc.

4.3.4

The design of the concrete-filled steel tube arch bridge shall meet the following requirements.

4.3.5

The concrete and crack widths of composite bridges and bridge decks shall meet the following requirements.

5.1 General provisions

5.1.1

The composite structural members shall be subjected to the limit state checking calculation of the bearing capacity and the limit state checking calculation of the normal service; and the structural performance of the composite structure within the design working life shall be guaranteed.

5.2 Steel-concrete composite beam

5.2.1

The checking calculation of design of steel-concrete composite beam shall meet the following requirements.

5.2.2 The checking calculation of the flexural capacity of the steel-concrete composite

beam section shall meet the following requirements.

5.3.1 For steel-concrete composite slabs, the longitudinal shear bond bearing capacity

shall be checked.