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# GB

## NATIONAL STANDARD

## OF THE PEOPLE'S REPUBLIC OF CHINA

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**GB/T 50448-2008** 

## Code for Application Technique of Cementitious Grout

水泥基灌浆材料应用技术规范

Issued on March 31, 2008

**Implemented on August 1, 2008** 

Jointly issued by the Ministry of Housing and Urban-Rural Development and the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China

#### National Standard of the People's Republic of China

## **Code for Application Technique of Cementitious Grout**

#### GT/T 50448-2008

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#### Foreword

According to the requirements of Document Jian Biao [2005] NO.124 issued by Ministry of Housing and Urban-Rural Development of P.R.C.- "Notice on Printing the Development and Revision Plan (Batch two) of National Engineering Construction Standards in 2005", basing on extensive investigation, special-topic test and study, a good deal of opinions from various departments, engineering practice summarizing and by referring to both home and abroad standards and relevant data, this code, authorized by China Metallurgical Construction Association, is developed by Central Institute of Building and Construction of China Metallurgical Group Corp jointly with relevant design & construction organizations and manufacturers.

The code comprises 8 chapters and 3 annexes with the main contents as follows: General Provisions, Terms, Basic Requirements, Site Reinspection, Engineering Design, Construction and Engineering Acceptance.

The Ministry of Housing and Urban-Rural Development of P.R.C. in charge of the administration of this code and Central Institute of Building and Construction of China Metallurgical Group Corp is responsible for the explanation of specific technical contents. All relevant organizations are kindly requested to sum up and accumulate your experiences in actual practices during the process of implementing this code. The relevant opinions and advice, whenever necessary, can be posted or passed on to Central Institute of Building and Construction of China Metallurgical Group Corp (address: No. 33 Xitucheng Road, Hai Dian District, 100088, Beijing, China; E-mail: bnvc@bjnvc.com) for reference during later revision.

#### Chief development organization:

Central Institute of Building and Construction of China Metallurgical Group Corp

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#### **1** General Provisions

**1.0.1** This code is developed in order to ensure the leading technology, safety, usability, economic rationality and the quality of cementitious grout during engineering design, construction and usage.

**1.0.2** This code is applicable to the inspection and acceptance of cementitious grout application as well as the design, construction, quality control and engineering acceptance of grouting engineering.

**1.0.3** In addition to meet the requirements of this code, the engineering to use cementitious grout shall also meet the provisions stated in current related national standards.

#### 2 Terms

2.0.1 Cementitious grout

A kind of dry mixture with rational graduation and produced by cement, aggregate (or without aggregate), admixture and mineral according to industrialization progress; after it is watered and then mixed evenly, it characterizes pourable fluidity, light-expansion, high early stage, later strength and no bleeding

2.0.2 Baseplate grouting

The filling grouting carried out between the base-plate bottom surface of equipment or steel-structure column base and concrete foundation surface after anchor grouting for foundation bolt in order to achieve tight contact with base plate and uniform load transmission

2.0.3 Self-leveling grouting

The method of making use of the good fluidity and relying on the self-gravity of cementitious grout during the process of grouting to achieve grouting requirements

2.0.4 High-level funnel grouting

The method to make use of high-level funnel to improve potential energy difference to achieve grouting requirements when the grouting requirements can not be realized by the self-flow of cementitious grout during the grouting process

2.0.5 Pressure grouting

The method to adopt grouting supercharging equipment during the grouting of cementitious grout so as to meet grouting requirements

2.0.6 Early age expansion

Volume expansion generated after watering and mixing of cementitious grout and which lasts initial setting

**2.0.7** Post-hardening expansion

The volume expansion generated along with expansible hydrated product generation during the setting and hardening of cementitious grout

2.0.8 Combination expansion

With both early age expansion and post-hardening expansion simultaneously

#### **3** Basic Requirements

**3.0.1** Cementitious grout is applicable to foundation bolt anchorage, the grouting of equipment foundation or steel-structure column-base plate, the reinforcement/ reconstruction



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