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

JG/T 408-2019

**Cementitious grout for sleeve of rebar splicing
(English Translation)**

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard is a revision of JG/T 408-2013 "Sleeve Grouting for Reinforcement Connection", and is in line with JG/T 408-2013 "Sleeve Grouting for Reinforcement Connection" Compared with grouting material, the main technical content changes are as follows.

- Added normal temperature type sleeve grouting material and low temperature type sleeve grouting material, deleted the definition of grouting sleeve for steel bar connection (see section 3 chapter);
- Added the content of the material chapter (see Chapter 4);
- Deleted the original 5.1.1, modified the range of the difference between the vertical expansion rate of 3h, 24h and 3h, and added the 28d self-drying shrinkage index Requirements, increase the temperature usage requirements and performance index table of low-temperature sleeve grouting material (see Chapter 5);
- Increase the molding and maintenance requirements of low-temperature sleeve grouting material, modify the fluidity test requirements, and increase the self-drying shrinkage test

Inspection requirements (see Chapter 6);

--Added the factory inspection items of low temperature type sleeve grouting material, and revised the judgment rules (see Chapter 7);

- Delete the requirement that each bag (tube) has a net content of 50kg (see Chapter 9);

--- Added the non-contact measurement method of vertical expansion rate of normal temperature sleeve grouting material (see Appendix C);

--- Increase the self-drying shrinkage test (see Appendix D).

This standard was proposed by the Standard Rating Institute of the Ministry of Housing and Urban-Rural Development.

This standard is under the jurisdiction of the Engineering Quality Standardization Technical Committee of the Ministry of Housing and Urban-Rural Development.

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1 Scope

This standard specifies the terms and definitions, materials, requirements, test methods, inspection rules, delivery and inspection of sleeve grouting material for steel bar connection.

Collection, marking, packaging, transportation and storage.

This standard applies to cement-based grouting materials used for sleeve grouting of ribbed steel bars.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this document.

For undated references, the latest version (including all amendments) applies to this document.

GB 175 General Portland Cement GB/T 2419 Method for measuring fluidity of cement mortar GB 8076 concrete admixture GB/T 8077 Test method for homogeneity of concrete admixtures GB 12573 Cement sampling method GB/T 14684 Sand for construction GB/T 17671 Cement mortar strength inspection method (ISO method) GB 20472 sulphoaluminate cement GB/T 23439 Concrete Expansion Agent GB/T 50080 Standard Test Method for Performance of Ordinary Concrete Mixture JC/T 681 Planetary cement mortar mixer JG J 63 Concrete Water Standard JG/T 223 Polycarboxylic acid series high performance water reducer

3 Terms and definitions

The following terms and definitions apply to this document.

Cement is the basic material, with fine aggregates, and a dry mixture composed of concrete admixtures and other materials. Referred to as "sleeve irrigation Slurry". The material has good fluidity, early strength, high strength, micro-expansion and other properties after being stirred with water. It is filled between the sleeve and ribbed steel in the gap, a reinforced sleeve grouting connection joint is formed.

3.2 Normal temperature type cementitious grout for sleeve

It is suitable for sleeve grouting whose ambient temperature at the grouting part within 24h during grouting construction and maintenance is not lower than 5°C.

3.3 Low temperature type cementitious grout for sleeve

It is suitable for sleeve grouting with the ambient temperature range of -5°C~10°C at the grouting part within 24h during grouting construction and curing.

4.1 Cement

The cement should be Portland cement and ordinary Portland cement, and should meet the requirements of GB 175, and the sulfoaluminate cement should meet the requirements of GB 20472.

Provisions.

4.2 Fine aggregate

The fine aggregate should be natural sand, which should meet the requirements of GB/T 14684, and the maximum particle size should not exceed 2.36mm.

4.3 Concrete admixture

The concrete admixture should meet the requirements of GB 8076, GB/T 23439 and JG/T 223.

4.4 Other materials

All other materials in the product formula should comply with the current national product standards.

5.1 General requirements

5.1.1

The sleeve grout should be prepared according to the water consumption required by the product design (instructions). The mixing water should meet the requirements of JG J 63.

5.1.2

When using normal temperature sleeve grouting material, the ambient temperature of the grouting part within 24h during the construction and maintenance process should not be lower than 5°C.

When using low-temperature sleeve grouting, the ambient temperature of the grouting part within 24h during the construction and maintenance process should not be lower than -5°C, and should not exceed Over 10°C.

5.2 Performance requirements

5.2.1

The performance of normal temperature sleeve grouting material should meet the requirements of Table 1.

5.2.2

The performance of the low-temperature sleeve grouting material should meet the requirements of Table 2.

6.1 General requirements

6.1.1

The temperature of the test chamber should be 20°C±2°C, the relative humidity should be