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

GB/T 35164-2017

Limestone powder used for cement, mortar and concrete

用于水泥、砂浆和混凝土中的石灰石粉

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Table of Contents

- 1 Scope
- 2 Normative references
- 3 Terms and definitions
- 4 Components and materials

Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009. This standard proposed by the China Building Materials Federation. This standard by the National Cement Standardization Technical Committee (SAC/TC184) centralized. The main drafting units of this standard. China Building Materials Science Research Institute, Yunnan Construction Investment Construction Co., Ltd. thirteen, Sichuan Xin Tongling Concrete Co., Ltd., Chongqing Branch of the Construction Industry Technology Co., Ltd., Wuhan Deyi Timber Technology Development Co., Ltd., Xiamen Esiou standards Sand Co., Ltd. Participated in the drafting of this standard. Beijing Xinao Concrete Group Co., Ltd., Kerry Wah Special Cement Co., Ltd., Chongqing San San Industrial Co., Ltd., Beijing Gao Qiang Concrete Co., Ltd., China Resources Cement Technology Research and Development Co., Ltd., Shenzhen Guang Tian Group Co., Ltd. Company, Sichuan Leeson Building Materials Group Co., Ltd., Zhuzhou Hongxin Technology Development Co., Ltd., Chongqing Construction Engineering Eighth Construction Co., Ltd., Hebei Construction Group Co., Ltd., China Construction West Construction Co., Ltd., China Nuclear Building Materials Co., Ltd., Anhui Guancheng Power Equipment Co., Ltd., Beijing Construction University, Yangtze River Water Resources Commission, Yangtze River Academy of Sciences, Fujian Academy of Building Research, Fuzhou Geelong Concrete Co., Ltd., Xiamen, Chi Yan Material Group Co., Ltd., Xiamen Yu-kun Municipal Gardens Project Co., Ltd., Zhejiang Wannuo Construction Co., Ltd., Shandong Tiesheng Engineering Testing and Testing Heart Co., Ltd., Shanghai Construction Engineering Group Co., Ltd., Guangdong Ryan Technology Industrial Co., Ltd., Guangdong Hengli Concrete Products Co., Ltd., Zhejiang Zhongfu Construction Group Co., Ltd. The main drafters of this standard. Wei Liying, Liu Chen, Yan Bilan, Zhao Shunzeng, Yang Jimin, Zhang Dakang, Zeng Jun, Lv Jian, Yang Wenlie, Zheng Xu, Min Jiangning, Song Shaomin, Ma Zhao mode, Ma Xueying, Li Qian, Li Guangming, Li Yanchang, Wang Bo, Zhao Siyuan, Xie Renzhi, Li Shaoqiang, Chen Guoqian, Chen Jun, Deng Minhui, Guo Ke, Chen Xiangzhe, Liu Yongqi, Yang Wen, Du Zengqiang, Zhang Huaixin, Zhao Jianxun, Yan Jianjun, Dong Yun, Zhou Min, Wang Shengcheng, Lin Guozhong, Ding Fulin, Lin Liling, Wu Chenghui, Zhang Bao Yan, Qian Jianjun, Lu Aimin, Zhi Heng Xin, Wu Delong, Zhong Yilin, Wang Guoqiang, Pan Yahong, Wen Peiyan. Used in

cement, mortar and concrete limestone powder

1 Scope

China's national standard for ground limestone used in cement, mortar and concrete. It specifies the terms and definitions, the components and materials, the technical requirements, the classification and grades, the test methods, the inspection rules, the factory release, delivery and acceptance, and the packaging, marking, transport and storage. Limestone powder is the cheapest and most consequential thing that can be added to cement. It is not a pozzolan and it does not react much, but finely ground limestone fills the space between cement grains, improves the packing, gives the hydration products something to nucleate on, and reacts a little with the aluminates phases. The result is that a substantial fraction of the clinker can be replaced with no loss of practical performance. Since clinker production is where essentially all of cement's carbon dioxide originates - most of it from the limestone decomposing in the kiln rather than from the fuel - replacing clinker with limestone that has not been calcined is the single largest lever the industry has.

This standard specifies the terms and definitions used for limestone in cement, mortar and concrete, components and materials, technical requirements, classification Number, test methods, inspection rules, factory, delivery and acceptance, packaging, labeling, transportation and storage. This standard applies to mixing mortar and concrete as a mixture of limestone powder and cement production as a mixed material of lime Stone powder.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB 175 Universal portland cement

GB/T 176 Methods of chemical analysis of cement

GB/T 1345 cement fineness test method Screening method Determination of fluidity of
GB/T 2419 cement mortar

GB/T 5762 Building materials - Limestone, quicklime and hydrated lime - Chemical analysis methods Determination of specific surface area of cement GB/T 8074 GB/T 9774 cement bags

GB/T 12573 method of sampling cement

GB/T 17671 cement mortar strength test method (ISO method)

GB/T 26748 cement grinding aids

GB/T 35151 limestone - Determination of total organic carbon

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Limestone powder limestone powder The limestone grinding to a certain degree of fineness of the powder or limestone sand produced during the production of dust powder.

4 Components and materials

4.1 Limestone Calcium carbonate content of not less than 75%.

4.2 cement grinding aids In line with GB/T 26748 requirements, adding no more than 0.5% of the quality of limestone.