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

GB/T 19686-2015

Replacing GB/T 19686-2005

Rock wool thermal insulation products for building applications

建筑用岩棉绝热制品

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Foreword

This standard is drafted in accordance with the rules given in GB/T 1.1-2009. This standard replaces GB/T 19686-2005 "Building rock wool, slag cotton insulation products". Compared with GB/T 19686-2005, except Editorial changes to the main technical changes are as follows:

- modified the standard name;
- increased the scope of the standard does not apply (see Chapter 1,.2005 edition of Chapter 1); - the addition of the term "karst" (see 3.1);
- modified mark method (see 4.2,.2005 version 3.2); - Increased performance requirements (see 5.3); - different technical specifications for different uses of products (see Chapter 5, Edition.2005, Chapter 4);
- Added test item table 8 (see 7.1); Amend the standard normative Appendix A (see Appendix A, Appendix A of Appendix.2005). This standard is proposed by the National Building Materials Association. This standard is nationalized by the National Standardization Technical Committee for Thermal Insulation (SAC/TC191). The standard is responsible for drafting units. Nanjing Glass Fiber Research and Design Institute Co., Ltd., Weihai Bo Sheng New Materials Co., Ltd., North New Group Construction Co., Ltd., Yingkou Ningfeng Group Co., Ltd., Shandong Taishi Energy-saving Insulation Materials Co., Ltd., Shandong Luyang Co., Ltd. Long City Kang Meida new insulation materials Co., Ltd., Shanghai Where Fan New Building Materials Co., Ltd., Shanghai New Building Materials Yanmian Limited, Nanjing Heng Cheung Insulation Materials Manufacturing Co., Ltd., Guangde Shi Ke Yan Yanmian Manufacturing Co., Ltd., Hebei Huaneng Zhongtian Chemical Building Materials Group Co., Ltd., Tianjin Oriental Dragon Heating Equipment Co., Ltd., Wacker Chemical (China) Co., Ltd., Yangzhou Kewo Energy Saving Materials Co., Ltd., Guizhou new insulation materials Plant, Sichuan Pavo mineral fiber Products Co., Ltd., Nanjing Tongtian Yanmian Co., Ltd., Luoke Wei fire insulation materials (Guangzhou) Co., Ltd. Division, Beijing Jinyu Energy Saving Technology Co., Ltd., Liaoning Jinshi Technology Group Co., Ltd. Yanmian Products Branch, Nanjing Kanghua new energy-saving Materials Co., Ltd., Anhui Yanmian Building Materials Technology Co., Ltd., the national glass fiber product quality supervision and inspection center. The main drafters of this standard. Zhang

Jianhong, Wang Jiaqing, Zhou Pengju, Zhang Wenjun, Deng Yu, Zhao Shuheng, Lu Wenyang, Lu Junhua, Xie Yongming, Shen Shanyun, Fang Ming, Chen Kai, Wang Quanfeng, Li Runnian, Wang Xiuhua, Xu Jianyan, Wu Bin, Gao Zhao, Liu Yifeng, Wang Liting, Bao Na, Sun Jian, Zhou Xuexiang, Jia Lujun, Chen Shang, Wang Yumei, Li Yong, Chen Lihua, Cui Jun, Fang Yunwei, Zhang You. This standard replaced the previous version of the standard release.

--- GB/T 19686-2005. Building rock wool insulation products

1 Scope

China's national product standard for rock wool insulation used in buildings. It specifies the scope, the classification and marking requirements, the requirements, the test methods, the inspection rules, and the marking, packaging, transport and storage of rock wool products for building use. It applies to rock wool products used in the building envelope and in building components and floors, and does not apply to rock wool for thin-render external wall insulation systems. Rock wool occupies a particular place in building insulation because it is the mineral alternative to the organic foams, and the difference that matters is fire. Polystyrene and polyurethane insulate better per millimetre and cost less, but they burn; rock wool is spun from melted basalt and does not, which is why it is specified where the fire regulations require non-combustible insulation and why its use in facades has expanded after every major cladding fire. The standard sets the requirements around that: the reaction to fire and the classification that follows, the density which governs both the thermal performance and the mechanical behaviour, the thermal conductivity at the stated mean temperature, the dimensional stability, the compressive strength and the tensile strength perpendicular to the faces - the last being critical for a board that will be bonded and mechanically fixed to a wall and loaded in tension by wind suction. It also sets the water absorption and the water vapour behaviour, since rock wool is porous and open, and wet insulation both loses its thermal performance and loads the fixings. The exclusion of thin-render systems is deliberate: those products have their own, more demanding, standard because the loads and the failure consequences differ. This edition is now read together with amendment XG1 of 2026. Issued on 31 December 2015 and in force since 1 November 2016, it replaces GB/T 19686-2005.

This standard specifies the scope, classification and marking requirements, requirements, and tests for the use of rock wool insulation products (hereinafter referred to as rock wool products) in the construction sector Methods, inspection rules, signs, packaging, transportation and storage. This standard applies to rockwool products used in building envelope, and is also suitable for use in building components and floors with insulation Use of rock wool products. This standard does not apply to the use of external wall insulation thin plaster system used rock wool products.

2 Normative reference documents

The following documents are indispensable for the application of this document. For dated references, only the dated edition applies to this article. For undated references, the latest edition (including all modifications) applies to this document.

GB/T 191 Packaging and storage icon Insulation materials and their related terms

GB/T 4132 Test methods for mineral wool and its products GB/T

GB 6566 Radiation nuclide limits for building materials

GB/T 6682 Analytical laboratory water specifications and test methods Classification of Combustion Performance of Building Materials and Products GB/T

GB/T 10294 Thermal insulation materials - Determination of steady - state thermal resistance and related properties - Protective plate method

GB/T 10295 Thermal insulation materials - Determination of steady - state thermal resistance and related properties - Heat flow meter method Test method for hydrophobicity of insulating materials GB/T Thermal insulation for rock wool, slag - cotton and its products GB/T 11835-2007

GB/T 13480 Determination of compression performance of building insulation articles Flexible foam rubber and plastic insulation products GB/T 17794-2008

GB/T 18696.1 Measurement of sound absorption and acoustic impedance in acoustical impedance tubes - Part 1. Standing wave ratio method

GB/T 18696.2 Measurement of sound absorption and acoustic impedance in acoustic impedance tubes - Part 2. Transfer function method Measurement of sound absorption in acoustic reverberation chamber

GB/T 20247 Building materials and products - Damp heat performance - Determination of moisture permeability - Box method GB/T

GB/T 30802 Determination of point load performance of building insulation products Insulation products for construction - Determination of tensile strength of the surface perpendicular to the surface GB/T

GB/T 30805 Partial immersion method for building insulation products for the determination of short - term water absorption GB/T Determination of long - term water absorption by adiabatic product immersion method for building GB/T

GB/T 32379 Determination of formaldehyde emission from mineral wool and its products

3 Terms and definitions

GB/T 4132 Definitions and the following terms and definitions apply to this document.

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