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

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Designation for glass fibres

玻璃纤维产品代号

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Foreword

This document complies with the provisions of GB/T 1:1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents" Drafting: This document replaces GB/T 4202-2007 "Glass Fiber Product Code": Compared with GB/T 4202-2007, except for structural adjustment and compilation In addition to editorial changes, the main technical changes are as follows:

- a) Delete the definition of glass fiber wet mat (see 3:2 of the:2007 edition);
- b) The main characteristics of glass types have been changed (see 4:1:1, 4:1:1 of the:2007 version), and high silica fiber (QB) and quartz fiber have been added The symbols and main characteristics of (Q) and basalt fiber (BF) (see 4:1:1);
- c) Added the code name of composite yarn (see 4:1:2);
- d) Delete the types of interwoven and blended fabrics of glass fiber yarn and cotton yarn (see 5:1:2 of the:2007 edition);
- e) Added types of interwoven and blended fabrics of glass fiber yarn and carbon fiber yarn and types of interwoven and blended fabrics of glass fiber yarn and aramid fiber: Class (see 5:1:2);
- f) The types of interwoven and mixed woven tapes of glass fiber yarn and cotton yarn have been deleted (see 6:1:2 of the:2007 edition): Please note that some content in this document may involve patents: The publisher of this document assumes no responsibility for identifying patents: This document is proposed by China Building Materials Federation: This document is under the jurisdiction of the National Glass Fiber Standardization Technical Committee (SAC/TC245): This document was drafted by: Nanjing Glass Fiber Research and Design Institute Co., Ltd., Jushi Group Co., Ltd., Anhui Tongli New Materials Co., Ltd: Division, Yuanyuan New Materials Co., Ltd., Taishan Glass Fiber Co., Ltd.;

Changzhou Tianma Group Co., Ltd: (formerly Building Materials Factory No: 253), Jiangsu Changhai Composite Materials Co., Ltd:, Henan Guangyuan New Materials Co., Ltd:, Jiuding New Materials Co., Ltd:, Shandong Tianrui New Materials Technology Co., Ltd: Branch company, Molten Stone New Materials (Tianjin) Co., Ltd: The main drafters of this document: Xu Qi, Kang Yiyu, Wang Yumei, Ye Fenglin, Su Benzhang, Zhang Quanlei, Sun Xiuping, Zhao Jun, Xuan Weidong, Tang Zhiqiang, Zhang Wei, Wu Yongkun, Yang Pengwei, Li Zhiwei, Li Junguang, Miao Yin, Xia Xin, Yao Shufei, Zheng Peiqi: This document was first published in 1984, revised for the first time in:2001, revised for the second time in:2007, and this is the third revision: Glass fiber product code

1 Scope

China's national designation system for glass fibres. It specifies the yarn code and the associated designations. Glass fibre is described by a set of characteristics that have to travel with it: the glass composition, which determines the mechanical, electrical and chemical properties - E-glass for general reinforcement and electrical use, C-glass for chemical resistance, S-glass for strength; the filament diameter, which affects both the handling and the health classification; the number of filaments in a strand; the linear density; the twist; and the sizing, which is the coating applied as the fibre is drawn and which determines whether it will bond to the resin it is meant to reinforce. That last is invisible and decisive - the same glass with the wrong sizing produces a composite with a fraction of the expected strength. A designation system encodes all of it, which is what lets a composite manufacturer specify a reinforcement unambiguously.

This document specifies the code names for fiberglass products: This document applies to products such as fiberglass yarns, cloths, tapes, sleeves, felts and multi-layer fabrics:

2 Normative reference documents

The contents of the following documents constitute essential provisions of this document through normative references in the text: Among them, the dated quotations For undated referenced documents, only the version corresponding to that date applies to this document; for undated referenced documents, the latest version (including all amendments) applies to this document:

GB/T 18374 Terminology of reinforced materials

3 Terms and definitions

The terms and definitions defined in GB/T 18374 and the following apply to this document:

3:1 A mat made of continuous fiberglass monofilaments held together with a binder:

4 Yarn code

1 Code elements 4:1:

1 Types of glass Use one or more English letters to indicate the type of glass used, see Table 1:

Note: See Appendix A for a comparison of the Chinese and English meanings of each symbol, the same applies below: Table

1 Glass type symbols and main characteristics Main features of glass type symbols A has high alkali metal content, and its electrical insulation performance, strength and durability are lower than those of E glass AR is resistant to alkali corrosion BF is made of basalt or basalt-based volcanic rock and is dark brown in color: C Resistant to most acid corrosion (except HF) D has the characteristics of low dielectric constant E Universal, combining electrical insulation properties, strength and durability