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

GB/T 18370-2014

Replacing GB/T 18370-2001

Glass fibre woven roving

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Quarantine;
Standardization Administration of the PRC**

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules. This standard replaces GB/T 18370-2001 "fiberglass roving." This standard and GB/T 18370-2001 main technical difference.

--- E-glass fibers to E glass fibers, increased ECR glass fiber roving category (see Chapter 3);

--- Remove the fabric tensile breaking strength requirements (see the 2001 edition 5.6);

--- Increased laminate tensile strength, tensile modulus and flexural modulus of the requirements (see 4.6.1);

--- Modify the bending strength requirements laminates (see 4.6.1 and 4.6.2, 2001 edition 5.7.);

--- Fabric appearance quality is determined by a scoring method to the point system, and revised requirements (see 4.8, 2001 version 5.10.);

--- Remove the length requirements (see the 2001 edition 5.9);

--- Added Appendix A and Appendix B (see Appendix A and Appendix B). The standard proposed by China Building Materials Federation. This standard by the National Standardization Technical Committee fiberglass (SAC/TC245) centralized. This standard is drafted by: Nanjing Fiberglass Research and Design Institute Co., Ltd., Changzhou Tianma Group Co., Jia Shan County of Zhejiang Province Glass fiber weaving factory, Jushi Group Co., Ltd., the national glass fiber product quality supervision and inspection center. The main drafters of this standard. Chen Jianming, Wang Yumei, Chen Shang, Fang Yunwei. This standard replaces the standards previously issued as follows:

--- JC/T 281-1994, JC/T 576-1994. Fiberglass woven roving

1 Scope

China's national product standard for glass fibre woven roving - the coarse, heavy fabric woven directly from untwisted roving that carries the load in most hand-laid composites. It

specifies the classification, the requirements, the test methods, the inspection rules, and the marking, packaging, transport and storage, and it applies to fabric woven from E glass, ECR glass or alkali-containing glass fibre in which the mass ratio between the two yarn directions does not exceed 4:1, used principally to reinforce plastics. Woven roving is what a laminator uses when thickness has to be built up quickly and the part has to be strong. Chopped strand mat gives isotropic properties and conforms well, but its fibres are short and randomly oriented, so a mat laminate is weak for its weight. Woven roving puts continuous fibre along two axes, which multiplies the strength - and the two are normally alternated through the laminate, mat and roving, because the mat layers also serve to bond the roving layers to one another. The mass ratio limit in the scope is what makes a fabric woven roving rather than a unidirectional: beyond 4:1 the fabric behaves as a one-directional reinforcement and belongs to a different standard. The requirements are those that decide the laminate: the mass per unit area and its tolerance, the warp and weft density, the width and length, the moisture content, the combustible content - which measures the size on the fibre and therefore how it bonds to the resin - the tensile breaking strength in each direction, and the properties of the laminate made from the fabric under a defined lay-up. The test methods are referred to the reinforcement testing series. Issued on 5 December 2014 and in force since 1 October 2015, it replaces GB/T 18370-2001.

This standard specifies the fiberglass roving classification, requirements, test methods, inspection rules, marking, packaging, transportation and storage. This standard applies to E glass fibers, ECR glass fiber or alkali glass fiber as raw material woven fabric, two directions Yarn quality ratio not exceeding 4.1.

Note. The E glass fibers, ECR glass fiber or alkali glass fiber as raw material woven fabric is mainly used in reinforced plastics.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 191 Packaging - Pictorial signs 1033.1-2008 non-plastic foam density measurement
GB/T Part 1. Immersion method, liquid pycnometer method and titration method GB
/1040.4-2006 Plastics - Part

4 Determination of tensile properties T. isotropic and orthotropic fiber-reinforced complex
Test conditions composite material Plastic bending performance test method

GB/T 1449-2005 fiber reinforced

GB/T 1549 Methods for chemical analysis of fiber glass Plastic resin content test method

GB/T 2577-2005 glass fiber reinforced

GB/T 4202-2007 fiberglass product code

GB/T 7689.2 Test methods for woven fabrics - Part 2. The weft density determination

GB/T 7689.3 enhancements Part

3 Test method for woven fabrics. Determination of width and length

GB/T 9914.1 Test methods of enhancing Part 1. Determination of moisture content

GB/T 9914.2 Enhanced Test methods - Part 2. Determination of glass fiber content of combustibles

GB/T 9914.3 Enhanced Test methods - Part 3. Determination of mass per unit area