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

GB/T 23471-2018

Replacing GB/T 23471-2009

Laminated impregnated paper strawboard composite flooring

浸渍纸层压秸秆复合地板

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009. This standard replaces GB/T 23471-2009 "impregnated paper laminated straw composite floor". Compared with GB/T 23471-2009, the main technical changes of this standard are as follows:

- Modified terms and definitions (see Chapter 3, Chapter 3 of the.2009 edition);
- Modified stain, corner defect, and chipping index values (see Table 1, Table 1 of the.2009 edition);
- Revised the thickness deviation index (see Table 2, Table 2 of the.2009 edition);
- Modified static bending strength, internal bonding strength, water absorption thickness expansion rate, surface scratch resistance, dimensional stability, surface resistance to cigarette burning, table Surface dry heat resistance, surface contamination resistance, surface crack resistance and formaldehyde release limit indicators (see Table 3, Table 3 of the.2009 edition);
- Modified the formaldehyde emission test method (see 5.3.17,.2009 edition 5.3.17).

Please note that some of the contents of this document may involve patents. The issuing organization of this document is not responsible for identifying these patents. This standard was proposed by the National Forestry and Grassland Bureau. This standard is under the jurisdiction of the National Forestry Biomass Materials Standardization Technical Committee (SAC/TC416). This standard was drafted. Jiangsu Luoji Wood Industry Co., Ltd., Nanjing Forestry University, Shanghai Timber Industry Research Institute Co., Ltd., Wanhua Ecology Board Industry Co., Ltd., Shandong Xingang Enterprise Group Co., Ltd., Jiangsu Zhongxin Desai Wood Industry Co., Ltd., Dehua Bunny Decoration New Materials Co., Ltd., Yellow River Delta Jingbo Chemical Research Institute Co., Ltd., Zhejiang Shenghua Yunfeng New Material Co., Ltd., Zhejiang Jufeng Wood Industry Co., Ltd. Limited company, Deqing Yufeng Decoration Materials Co., Ltd., Jiangsu Kendi Asia Wood Co., Ltd. The main drafters of this standard. Shen Mingsheng, Huang Helang, Sun Xiaomiao, Jiang Haidong,

Wei Ming, Yao Yong, Xie Xuqin, Chen Jianming, Tao Ye, Lu Bin, Shen Shichu, Sun Fengliang, Li Bo, Lu Rongjin, Yan Jianqiang, Yang Yuqi, Yan Haixing. The previous versions of the standards replaced by this standard are.

---GB/T 23471-2009. Impregnated paper laminated straw composite floor

1 Scope

China's national product standard for laminate flooring built on a straw-based board core. It specifies the classification, the requirements, the test methods, the inspection rules and the marking, packaging, transport and storage of flooring made by laminating impregnated decor paper onto a strawboard substrate. The product is ordinary laminate flooring with the core changed, and the reason for the change is agricultural. China produces several hundred million tonnes of crop straw a year, and the traditional disposal - burning it in the field - is a major seasonal source of air pollution that has been progressively banned. Straw is a lignocellulosic material that can be made into a panel like wood, and doing so turns a disposal problem into a product while displacing wood fibre in a country that imports most of its timber. The difficulty is that straw is not wood. Its surface carries a waxy silica-rich layer that resists the urea-formaldehyde adhesives used for wood panels, so straw board is generally bonded with isocyanate adhesive instead, which bonds well and brings its own handling requirements. Straw also has a different density, a different moisture behaviour and a lower internal bond strength than wood fibre. So the properties that matter for a floor - the thickness swelling after water immersion, which is what makes a floor buckle at a spill; the internal bond and the surface soundness, which decide whether the laminate stays attached; the dimensional stability; and the impact and abrasion resistance of the wear layer - all have to be specified and verified for this substrate rather than assumed from the wood-based equivalents. The formaldehyde emission class is specified as for any panel used indoors. Issued on 7 June 2018 and in force since 1 January 2019, it replaces GB/T 23471-2009.

This standard specifies the terms and definitions, requirements, test methods, inspection rules, and signs, packaging, and impregnation of laminated straw composite flooring. Transportation and storage. This standard applies to the production, sales, supervision, inspection and circulation of impregnated paper laminated straw composite flooring.

2 Normative references

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

GB/T 2828.1-2012. Sampling procedures for sampling by sampling - Part 1 . Batch-by-batch

inspections by Retrieving Quality of Acceptance (AQL) plan

GB/T 15102-2017 impregnated film paper veneer wood-based panel

GB/T 17657-2013 Test method for physical and chemical properties of wood-based panels and veneered panels

GB/T 18102-2007 impregnated paper laminated wood flooring

GB 18580-2017 Indoor decoration materials, artificial release boards and their products, formaldehyde release limit

GB/T 21723-2008 wheat (rice) straw particle board

3 Terms and definitions

GB/T 15102-2017, GB/T 18102-2007 and GB/T 21723-2008 define the following terms and definitions apply In this document. For ease of use, some of the terms and definitions in GB/T 21723-2008 are repeated below.

3.1 Wheat (rice) straw chipboard wheat/rice-strawparticleboard Using wheat (rice) straw as raw material and isocyanate (MDI) resin as adhesive, by pulverizing, drying, sorting, sizing, forming, pre-pressing, heat Plates made by pressing, cooling, trimming and sanding. [GB/T 21723-2008, definition 3.1]

3.2 Film coated with thermosetting amino resin, coated on the surface of wheat (rice) straw particleboard with a density greater than 0.85g/cm³, plus Decorative layer, wear layer, balance layer on the back, and hot-pressed floor.

4 Requirements

4.1 grade According to the appearance quality of the product, it is divided into excellent products and qualified products.

4.2 Appearance quality

4.2.1 Appearance quality requirements shall be in accordance with Table 1.