

ICS 83.140.99
CCS G 47

JG

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

JG 118-2000

Replacing JG/T 118-2000

**Rubber isolation bearings for buildings
(English Translation)**

Issued on: June 26, 2018

Implemented on: December 1, 2018

**Issued by: Ministry of Housing and Urban-Rural Development of the
People's Republic of China**

Table of Contents

- Foreword
- 1 Scope
- 2 Normative references
- 3 Terms and definitions, symbols
- 3.1 Terms and definitions

Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard is a revision of JG 118-2000 "Building Isolation Rubber Bearing". The main technical changes of this standard compared with JG 118-2000.

as follows.

- Modifications supplement the relevant terms and definitions and add the symbols referenced in this standard (see Chapter 3);
- Increased the shape factor and the general size of the support (see 5.2, 5.3);
- Increased physical and mechanical performance indicators of high damping rubber bearings (see Table 2 in 6.1);
- Modified vertical compression stiffness and horizontal performance requirements, increased axial tensile stiffness performance requirements, increased lateral non-uniform variation Shape requirements, modified compression deformation performance requirements (see Table 5 in 6.4);
- Revised the vertical ultimate compressive stress performance requirement when the horizontal displacement is 0.55 times the inner rubber diameter of the support, increasing the height the horizontal performance requirements of the damping rubber bearing are modified to meet the requirements of the horizontal ultimate deformation capacity (see Table 5 in 6.4);
- Removed the fire performance requirements (see version 4.4.3 of the 2000 version) and test methods (see 5.4.3 of the 2000 edition);
- Modified the performance requirements of natural rubber bearings and lead rubber bearings (see Table 7 in 6.6.1);
- Increased performance requirements for high damping rubber bearings (see Table 8 in 6.6.2);

- Increased vertical tensile stiffness, vertical ultimate tensile stress test method (see 7.4.5);
- Increased lateral uneven deformation measurement method (see 7.4.6);
- Modified the loading frequency in the horizontal equivalent stiffness test method (see 7.4.7);
- Increased the calculation model of the isolation bearing (see Appendix B);
- Increased the mechanical performance parameters and specifications of the seismic isolation bearing products (see Appendix C).

This standard was proposed by the Institute of Standardization of the Ministry of Housing and Urban-Rural Development.

This standard is under the jurisdiction of the Building Structure Standardization Technical Committee of the Ministry of Housing and Urban-Rural Development.

This standard was drafted. China Academy of Building Research, Guangzhou University, Huazhong University of Science and Technology, Beijing University of Architecture, Nanjing University of Technology, cloud South China Earthquake Engineering Research Institute, China Building Standard Design and Research Institute, Hengshui Zhentai Seismic Equipment Co., Ltd., Yunnan Zhenan Shock Absorption Technology Co., Ltd.

Co., Ltd., Xi'an Dasheng Isolation Technology Co., Ltd., Wuxi Shengfeng Building New Material Co., Ltd., Beijing Rubber Industry Research and Design Institute, Hengshui Yili Engineering Rubber Machinery Manufacturing Co., Ltd., Liuzhou Dongfang Engineering Rubber Products Co., Ltd., Beijing Construction Engineering Design and Research Institute.

1 Scope

This standard stipulates the symbols, classification and marking, general requirements,, test methods, inspection rules and standards of building vibration-insulated rubber bearings.

Awareness, packaging, transportation and storage.

This standard applies to building isolation rubber bearings used in industrial and civil buildings.

2 Normative references

The following documents are indispensable for the application of this document. 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/T 469 lead ingot

GB/T 528 Determination of tensile stress-strain properties of vulcanized rubber or thermoplastic rubber Rubber and rubber -- Determination of hardness of indented rubber - Part 1 . Shore hardness test method (Shore hardness) GB/T 2941 Rubber Physical Testing Methods General Procedures for Sample Preparation and Regulation GB/T 3274 carbon structural steel and low alloy structural steel hot rolled thick steel plate and steel strip GB/T 3512 vulcanized rubber or thermoplastic rubber hot air accelerated aging and heat test GB/T 3672.1 Tolerance of rubber products - Part 1. Dimensional tolerances GB/T 3672.2 Tolerance of rubber products - Part 2. Geometric tolerances Rubber and rubber -- Determination of compression set - Part 1 . normal temperature and temperature conditions Rubber and rubber products -- Determination of compression set - Part 2. Under low temperature conditions GB/T 7760 vulcanized rubber or thermoplastic rubber - Determination of bond strength Static tensile test of GB/T 7762 vulcanized rubber or thermoplastic rubber resistant to ozone cracking GB/T 15256 vulcanized rubber or thermoplastic rubber - Determination of low temperature brittleness (multi-sample method) GB/T 20688.1-2007 Rubber bearings - Part 1. Test methods for isolated rubber bearings General requirements for physical test methods for HG/T 2198 vulcanized rubber

3 Terms and definitions, symbols

The following terms and definitions, symbols apply to this document.

3.1 Terms and definitions

3.1.1

Isolation device consisting of multiple layers of rubber and multiple layers of steel or other materials alternately stacked, including natural rubber bearings (LNR), lead Core rubber bearing (LRB) and high damping rubber bearing (HDR).

3.1.2

Lifetime designworkinglife the period of normal use and maintenance of the building isolation rubber bearing does not lose the effective use function.