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

中华人民共和国国家标准

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Replaces GB/T 11944-2002

Insulating glass unit

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Foreword

This Standard is drafted according to the rules specified in GB/T 1.1-2009.

Compared with GB/T 11944-2002, in addition to editorial changes, the main technical changes of this Standard are as follows:

- Deleted the requirements of insulating glass unit specification (See the Version 4 in 2002);
- Increased requirements on dislocation (See 6.1.4);
- Thickness of sealant layer is changed into width of sealant layer, and requirements are modified (See 6.1.5, the Version 5.2.4 in 2002);
- Modified the appearance requirements of insulating glass unit (See 6.2, the Version 5.3 in 2002);
- Deleted the sealing performance requirements (See the Version 5.4 in 2002);
- Deleted the durability of climate cycle (See the Version 5.7 in 2002);
- Deleted the requirements on durability of high temperature and humidity (See the Version 5.8 in 2002);
- Increased the requirements on durability of water vapor seal (See 6.5);
- Increased requirements on initial gas content of inflatable insulating glass unit (See 6.6);
- Increased requirements on the gas seal durability of inflatable insulating glass unit (See 6.7);
- Increased the requirements on Value₁₇ (See 6.8);
- Modified the test method of dew point (See 7.3, the Version 6.4 in 2002);
- Increased description about failure cause and service life of insulating glass unit (See Annex A);
- Increased methods for testing edge sealing bond performance (See Annex B);
- Increased methods for testing water vapor permeability of edge sealing material (See Annex C);
- Increased methods for testing moisture content in drying agent (See Annex D);
- Increased description about optical phenomenon and visual quality of insulating glass unit (See Annex E);

This Standard adopts the redraft method and prepared with reference to EN1279:2002 *Insulating*

glass unit for Building, the degree of consistency of which is not equivalent to this Standard.

This Standard is put forward by China Building Material Council.

This Standard is standardized by the National Architectural Glass Standardization Technical Committee (SAC/TC 255).

The units responsible for drafting this Standard are: Qinhuangdao Glass Industry Research and Design Institute, National Glass Quality Supervision and Inspection Center and China Building Material Test & Certification Center.

The units participating in drafting this Standard are: Shanghai Yaohua Pilkington Glass Co., Ltd., Dow Corning (China) Investment Co., Ltd., CSG Holding Co., Ltd., Hangzhou Zhijiang Silicone Chemicals Co., Ltd., Xinyi Glass Holdings Co., Ltd., Zhengzhou Zhongyuan Applied Technology Research and Development Co., Ltd., Zhengzhou Fulong New Materials Technology Co., Ltd., Wuxi Saili Molecular Sieve Co., Ltd., Chengdu Guibao Science and Technology Co., Ltd., Guangzhou Baiyun Chemical Industry Co., Ltd., CHAC Technology Co., Ltd., Dongying Shengming Glass Co., Ltd.

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The issuances of previous versions of the standards replaced by this Standard are as follows:

——GB 7020—1986;

——GB 11944—1989;

——GB/T 11944-2002.

Insulating glass unit

1 Scope

This Standard specifies the terms, definitions, classification, requirements, test methods, inspection rules. Packaging, marks, transportation and storage of Insulating glass unit.

This Standard applies to the insulating glass unit used for cold storage, decoration and transportation in the field of building and other fields, and can be taken as reference by the insulating glass unit used for other purposes.

2 Normative references

The articles contained in the following documents have become this standard when they are quoted herein. For the dated documents so quoted, all the modifications (Including all corrections) or revisions made thereafter shall be applicable to this Standard.

GB/T 1216 External micrometer

GB/T 8170 Rules of rounding off for numerical values & expression and judgement of limiting values

GB/T 22476 Calculation and determination of steady-state U values (thermal transmittance) of multiple glazing

3 Terms and definitions

The following terms and definitions are applicable to this document.

3.1

Insulating glass unit

Two or more sheets of glass, in order to achieve effective support, even separation and bond seal at edge, thus form the glass product with dry gas space between glass layers.

Note: quality of various materials for producing insulating glass unit is closely related to the service life of insulating glass unit; therefore, the material required in standard specification should be used in insulating glass unit production, and generally its service life should not less than 15 years, see Annex A.

4 Classification



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