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

GB 9962-1999

Laminated glass
(English Translation)

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Foreword

This Standard is an equivalent standard of Japanese Standard JIS R3205.1989

Laminated glass in technical contents; and it makes reference to ANSI

Z97.1.1984 Safety glazing materials used in buildings - Safety performance

specifications and methods of test, ISO/DIS 12543-1~12543-6.1997 Glass in

building - Laminated glass and laminated safety glass, AS/NZS 2208.1996

Safety glazing materials in buildings, etc.

This Standard is the first revision of the 1988 edition. The revised contents are as follows.

ADD the laminated glass of category II on the basis of reserving the original laminated glass of categories I and III. ADD the following four indicators. visible light transmittance, visible light reflectance, moisture resistance and wind pressure resistance. Except the moisture resistance, the other three items are recommended indicators. The impact resistance is renamed falling ball impact stripping performance. The penetration resistance is renamed grape-shot bag impact performance. In the meantime, MAKE appropriate modifications to the

technical requirements and test methods of some test items.

In the revised standard, the radiation resistance, heat resistance and falling ball impact stripping performance are equivalent to the Japanese Standard JIS R3205; the grape-shot bag impact test adopts the requirements of the American Standard ANSI Z97.1; the moisture resistance test is equivalent to ISO/DIS 12543-4.

The Appendixes A and B of this Standard are normative appendixes.

This Standard replaces GB 9962-1988 from the date of implementation.

This Standard was proposed by State Bureau of Building Materials Industry.

This Standard shall be under the jurisdiction of the Glass Science Research Institute of China Building Materials Academy.

Drafting organization of this Standard. Glass Science Research Institute of China Building Materials Academy.

Main drafters of this Standard. Chen Zhengke, Han Song, Wang Ruyang, Wang Le and Hu Yue.

Laminated glass

1 Scope

This Standard specifies the classification, requirements and test methods for laminated glass.

This Standard is applicable to the laminated glass used in buildings. Other occasions can also use this Standard as reference. This Standard is not applicable to the laminated glass used in automobiles and other road vehicles.

2 Normative references

The provisions in the following standards become the provisions of this Standard through reference in this Standard. At time of publication, the editions indicated were valid. All standards are subject to revision, and parties who reach an agreement based on this Standard are encouraged to investigate the possibility of applying the latest editions of the standards indicated below.

GB/T 308-1989 Rolling bearings - Steel balls (neq ISO 3290.1975)

GB/T 531-1992 Rubber, vulcanized - Determination of shore A hardness
(neq ISO 7619.1986)

GB/T 1216-1985 External micrometer (neq ISO 3611.1978)

GB/T 5137.2-1996 Road vehicles - Safety glasses - Test methods for optical
properties (eqv ISO/DIS 3538.1992)

GB/T 5137.3-1996 Road vehicles - Safety glazing materials - Test methods
for resistance to radiation, high temperature, humidity, fire and simulated
weathering (eqv ISO 3917.1992)

GB/T 9963-1998 Tempered glass (eqv JIS R 3206.1989)

GB 11614-1999 Float glass

GB 17841-1999 Tempered and heat-strengthened glass used in curtain walls
(neq JIS R 3222.1996)

JC 433-1991(1996) Wired glass

JC/T 511-1993 Patterned glass

JC/T 512-1993 Packaging of automobile safety glass

JC 536-1994 Heat absorbing glass

JC/T 677-1997 Test method to model wind pressure for architectural glass
under the uniform static loads

3 Definitions

This Standard uses the following definitions.

3.1 Laminated glass

It refers to the glass products produced by putting the interlayer in between one
layer of glass and one or more layers of glass or plastic materials.

3.2 Interlayer

It refers to the materials playing the roles of bonding and isolation between
glass or between glass and plastic materials, so as to ensure that the laminated

glass has resistance to impact, solar control and sound insulation.

3.3 Laminated glass of category I

It refers to the laminated glass making no requirements for the grape-shot bag impact test.

3.4 Laminated glass of category II-1

It refers to the laminated glass with the grape-shot bag impact height of 1,200mm and conforming to the provisions of Section 5.11.

3.5 Laminated glass of category II-2

It refers to the laminated glass with the grape-shot bag impact height of 750mm and conforming to the provisions of Section 5.11.

3.6 Laminated glass of category III

It refers to the laminated glass with the total thickness of not greater than 16mm and conforming to the provisions of Section 5.11.

4.1 CLASSIFY in accordance with shapes.

For the multilayer products, the products with the total raw glass thicknesses of greater than 24mm, and the products using tempered glass as raw glass, the thickness tolerances shall be agreed by the supply and requisitioning parties.

5.3.3.1 Thickness deviation of dry laminated glass

The thickness deviation of dry laminated glass cannot exceed the sum OF the tolerances of the raw glass sheets constituting laminated glass AND the interlayer tolerances. When the total interlayer thickness is less than 2mm, the tolerances shall not be taken into consideration. When the total interlayer thickness is greater than 2mm, the tolerances shall be $\pm 0.2\text{mm}$.

5.3.3.2 Thickness deviation of wet laminated glass

The thickness deviation of wet laminated glass cannot exceed the sum OF the tolerances of the raw glass sheets constituting laminated glass AND the