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

GB/T 11982.1-2015

Replacing GB/T 11982.1-2005

**Polyvinyl chloride floor coverings - Part 1: Heterogeneous
polyvinyl chloride floor coverings**

聚氯乙烯卷材地板 第1部分：非同质聚氯乙烯卷材地板

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Table of Contents

1	Scope
2	Normative references
3	Terms and definitions
3.1	Heterogeneous polyvinyl chloride floor coverings
4	Classification, grade, and designation...
5	Requirements...
6	Test methods
6.3	Dimensional tolerances
6.4	Surface mass deviation
6.4.1	Instrument
6.5	Variation rate of heating sizes
6.5.1	Instrument
6.7	Wear resistance
6.7.1	Instruments and abrasives
6.14	Special performance
6.14.3	Welding strength
7	Inspection rules
7.1	Inspection classification
7.2	Lot grouping and sampling
	Appendix C

1 Scope

GB/T 11982.1-2015 is the Chinese national standard on polyvinyl chloride floor coverings - part 1: heterogeneous polyvinyl chloride floor coverings, in the field of rubber and plastic industries. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 11 September 2015 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 August 2016. Classification: ICS 83.140, CCS Q22. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered

complete in English translation.

This Part of GB/T 11982 specifies the terms and definitions, classification, grade and designation, requirements, test methods, inspection rules, marking, transportation, and storage of heterogeneous polyvinyl chloride floor coverings (hereinafter referred to as floor coverings). This Part applies to floor coverings with polyvinyl chloride resin as the main raw material laid on the floor of the building.

2 Normative references

The following documents are indispensable for the application of this document. For the dated references, only the editions with the dates indicated are applicable to this document. For the undated references, the latest edition (including all the amendments) are applicable to this document.

GB/T 1033.1-2008 Plastics - Methods for determining the density of non-cellular plastics - Part 1: Immersion method, liquid pycnometer method and titration method

GB/T 4100-2006 Ceramic tiles

GB/T 8427-2008 Textiles - Tests for color fastness - Color fastness to artificial light: Xenon arc fading lamp test

GB 8624 Classification for burning behavior of building materials and products

GB 18586 Indoor decorating and refurbishing materials - Limit of harmful substances of polyvinyl chloride floor coverings

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Heterogeneous polyvinyl chloride floor coverings

5.3.4.2 Pollution resistance REPORT test results.

5.3.4.3 Welding strength USE grade 32 and above floor covering to conduct welding strength test as agreed by the supplier and the purchaser. The average welding strength is ≥ 240 N/50 mm; the minimum is ≥ 180 N/50 mm.

5.3.4.4 Skid resistance REPORT test results.

6 Test methods

6.1 Standard test conditions The test piece, before the test, shall be left for at least 24 h under standard conditions of temperature $(23 \pm 2)^{\circ}\text{C}$ and relative humidity $(50 \pm 5)\%$. The test shall be performed under these conditions.

6.2 Appearance Under the scattered sunlight or fluorescent lamp, at 1 m from the test piece, obliquely visually check the appearance. RECORD whether there are various defects listed in Table 2.

6.3 Dimensional tolerances

6.3.1 Length PUT the wear layer of the entire floor covering under test upwards. Without tensile stress, lay it on a hard plane; USE a steel tape with a division value of 1 mm to measure the length at two positions parallel to the longitudinal direction at about 200 mm from both sides. TAKE the arithmetic mean of the two length measurement results to indicate the length of the floor covering, accurate to 10 mm.

6.3.2 Width According to the method of 6.3.1, use a steel tape with a division value of 1 mm to measure the width at the middle and both ends perpendicular to the longitudinal direction. TAKE the smallest width to indicate the width of the floor covering, accurate to 1 mm. PLACE the test piece with the section facing up on a microscope test bench; READ the thickness of the wear layer. If there are concave and convex patterns, measure the thickness of the protruding part. 3 measurements are performed on each test piece. RECORD the single thickness measured value of wear layer, accurate to

0.01 mm. 6.3.3.2.4 Test result Calculate the deviation of the arithmetic mean of all wear layer thickness measurements from the stated wear layer thickness value, accurate to 1%; and the deviation of a single wear layer thickness measurement from the arithmetic mean of all wear layer thickness measurements, accurate to

0.01 mm.

6.4.1 Instrument

6.4.1.1 Vernier caliper The division value is not greater than

0.1 mm.

6.4.1.2 Balance The sensitivity is not more than

0.01 g.

6.4.2 Sampling TAKE 5 square test pieces with a size of 100 mmx100 mm from the floor covering. Any side of the test piece shall be at least 100 mm from the edge of the floor covering.

6.4.3 Test procedure MEASURE the side length of the middle of each test piece, accurate to

0.1 mm. WEIGH and record the mass m_0 of each test piece, accurate to

0.01 g.

6.4.4 Test result The surface mass is calculated according to formula (1). The deviation between the arithmetic mean of the surface masses of the 5 test pieces and the explicit surface mass value is calculated as a percentage and accurate to 1%. Where: A - Surface mass, in grams per square meter (g/m²); m₀ - The mass of test piece, in grams (g); l - The length of test piece, in millimeters (mm); b - The width of test piece, in millimeters (mm).

6.5.1 Instrument

6.5.1.1 Constant-temperature blast oven Thermostat sensitivity is ± 1 °C.

6.5.1.2 Vernier caliper The division value is

0.02 mm.

6.5.2 Sampling Before taking the test piece, the floor covering shall be laid as flat as possible. TAKE 3 square test pieces with a size of 240 mmx240 mm from the floor covering. Any side of the test piece shall be at least 100 mm from the edge of the floor covering. Each side of each test piece shall be parallel or perpendicular to the length or width direction of the product.

6.5.3 Test procedure MARK the longitudinal and transverse directions on the test piece. As shown in Figure 1, along the longitudinal and transverse distances of the test piece, at 20 mm from the edge of the test piece, draw two parallel lines with a distance of 200 mm and mark 4 intersections. USE a Vernier caliper to measure the distance L₀ between each pair of marked lines in the longitudinal and transverse directions, accurate to

0.02 mm. Then put the wear layer of the test piece upward and lay it flat on a smooth glass plate or stainless steel plate sprinkled with talcum powder. The distance between the test pieces shall be more than 50 mm; they shall be placed together in a constant-temperature blast oven with a temperature of (80 $\pm$ 2)°C. The distance between the flat plate and the inner wall of the oven shall not be less than 50 mm. The vertical distance between the flat plates and between the flat plate and the oven shall not be less than 100 mm. TAKE out after holding for 6 h; LEAVE them for 24 h under standard test conditions. A 180 mmx180 mmx13 mm steel flat plate is pressed on the test pieces. Then, measure the distance L between each pair of marked lines of each test piece, accurate to

0.02 mm.

6.6.1.1 Constant-temperature blast oven Thermostat sensitivity is ± 1 °C.

6.6.1.2 Height Vernier caliper The division value is

0.02 mm.

6.6.2 Sampling Before taking the test piece, the floor covering shall be laid as flat as possible. TAKE 3 square test pieces with a size of 240 mmx240 mm from the floor covering. Any side of the test piece shall be at least 100 mm from the edge of the floor covering.