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

GB/T 5464-2026

Replacing GB/T 5464-2010

Non-combustibility test method of building materials

建筑材料不燃性试验方法

(English Translation)

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document replaces GB/T 5464-2010 "Test Methods for Non-combustibility of Building Materials". Compared with GB/T 5464-2010, this document has the following differences.

Aside from structural adjustments and editorial changes, the main technical changes are as follows.

- a) The installation requirements for two additional in-furnace thermocouples have been added (see 4.4);
- b) The requirements for the use of thermocouples have been changed (see 4.4, 4.4.1 of the 2010 edition);
- c) The schematic diagram showing the positions of the heating furnace, sample, and thermocouple has been revised (see Figure 2, Figure 2 in the 2010 version);

- d) The technical details of the thermal sensor device have been added (see 4.5);
- e) A schematic diagram of a contact thermocouple and its auxiliary devices has been added (see Figure 4);
- f) The requirements for specimen size have been changed (see 5.1, Chapter 5 of the 2010 edition), and a density requirement for the stacked specimens has been added [see 5.2.2a)].

The requirements for handling burrs generated during sample preparation have been increased [see 5.2.2b)], and the requirements for preparing liquid samples have been increased (see 5.2.3);

- g) The conditions for furnace temperature equilibrium have been changed (see 7.2.4, 2010 version 7.2.4);
- h) The temperature range in the furnace temperature calibration procedure has been changed (see 7.3.2, 2010 version 7.3.2);
- i) The conditions for early termination of the trial have been changed (see 7.4.8, 7.4.7 in the 2010 version);
- j) The requirements for observing phenomena and recording furnace temperature during the test have been changed (see 7.5, 2010 version 7.5);
- k) The presentation of the temperature rise results has been changed (see 8.3, 2010 edition of 8.3).

This document is modified to adopt ISO 1182:2020 "Building materials - Tests for fire reaction and non-combustibility".

The technical differences between this document and ISO 1182:2020, and the reasons therefor, are as follows.

---The reference files for the terminology and definition guidelines have been changed, replacing them with GB/T 5907.1, GB/T 5907.2, and GB 8624.

ISO 13943 (see Chapter 3) should be adopted to adapt to my country's technical conditions.

---The definition of the term "homogeneous product" has been changed (see 3.4) to reflect the actual situation in my country;

---The requirements for thermocouple implementation standards have been changed, replacing IEC 60584-1 with the normatively referenced GB/T 16839.1-2018.

(See 4.4) to conform to my country's actual situation;

---The requirements for the implementation standard of state regulation have been changed, replacing EN13238 (see section 6) with the normatively referenced GB/T 40238.

(Chapter), to conform to the actual situation in our country.

The following editorial changes have been made to this document.

---The names of the standardized documents have been changed to ensure consistency with existing standardized documents;

---Added source information for terms and definitions 3.1 and 3.4.

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the National Fire and Rescue Administration.

This document is under the jurisdiction of the National Fire Protection Standardization Technical Committee (SAC/TC113).

1 Scope

This document describes a method for determining the major components of non-homogeneous products and the non-flammability of homogeneous products using a heating furnace system under specific conditions.

This document applies to the determination of the non-combustibility of building materials, decorative materials, and products used in industrial and civil buildings. For other applications...

The non-flammability of materials and products used in this study should be used as a reference.

Note: Information on the precision of the test method can be found in Appendix A.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

This document.

GB/T 5907.1 Firefighting Glossary Part 1: General Terms GB/T 5907.2 Firefighting Glossary Part 2: Fire Prevention GB 8624 Classification of fire performance of building materials and products GB/T 16839.1-2018 Thermocouples - Part 1: Electromotive force specifications and tolerances (IEC 60584-1:2013, IDT) GB/T 40238 Requirements for selection of substrates, conditioning and installation of specimens for combustion testing of building materials and products

3 Terms and Definitions

The terms and definitions defined in GB/T 5907.1, GB/T 5907.2 and GB 8624, as well as the following terms and definitions, apply to this document.

product

The collective term for materials, parts, or components for which information needs to be provided.

material

A mixture of a single substance or a uniformly dispersed substance.

Examples. metal, stone, wood, concrete, polystyrene resin, polyurethane resin, glass wool, rock wool, etc.

loosefil material

Materials with irregular shapes.

homogeneous product

Articles made from a single material or with uniform density and composition.

non-homogeneous product Articles that do not meet the definition of homogeneous articles and are composed of multiple major and/or minor components.