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

GB/T 11785-2026

Replacing GB/T 11785-2005

**Reaction to fire tests for floorings - Determination of the
burning behavior using a radiant heat source**

铺地材料的燃烧性能测定 辐射热源法

(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 supersedes GB/T 11785-2005 "Determination of Combustion Performance of Flooring Materials - Radiant Heat Source Method", and is consistent with GB/T 11785-2005.

In comparison, aside from structural adjustments and editorial changes, the main technical changes are as follows.

- a) Added a warning (see Warnings);
- b) The introductory texts for terms and definitions have been changed (see Chapter 3, Chapter 3 of the 2005 edition);
- c) The definition of thermal radiation flux has been changed (see 3.1, 2005 edition 3.1);
- d) The abbreviation for the critical thermal radiation flux at extinction has been changed (see 3.2, 2005 edition);
- e) The definition of "critical thermal radiation flux" has been changed (see 3.4, 2005 edition 3.4);

- f) The term "zero point" and its definition have been added (see 3.6);
 - g) The term "piece" and its definition have been added (see 3.11);
 - h) The measurement principle has been added (see Chapter 4);
 - i) Increased requirements for thermocouple compliance standards (see 5.11);
 - j) The requirements for the substrate implementation standard have been changed (see 6.2, 5.3 of the 2005 edition);
 - k) Installation requirements for modular test specimens have been added (see 6.5);
 - l) Installation requirements for relaxed laying material specimens have been added (see 6.6);
 - m) Added descriptions of the formal experiments (see 6.8);
 - n) The requirements for the specimen conditioning performance standard have been changed (see Chapter 7, Chapter 6 of the 2005 edition);
 - o) A provision has been added stipulating that the test can be terminated if the specimen is not ignited or if all flames are extinguished within 10 minutes (see 8.2.4);
 - p) The instructions for determining specimen selection based on the most unfavorable test results of HF-E and/or HF-30 have been revised (see 8.2.6, 2005 edition).
- (7.2.6)
- q) The description for calculating the CHF average using HF-30 and/or HF-E values has been changed (see 9.2, 8.2 of the 2005 edition);
 - r) Added instructions regarding the handling of specimens that reignite after the flame has been extinguished (see 9.3);
 - s) The principle of flue gas testing has been added (see A.2);
 - t) Added instructions on using LED light sources (see A.3.2).

This document is modified to adopt ISO 9239-1:2025 "Tests for reaction to fire - Part 1: Tests for combustion characteristics using radiant heat sources".

This document has undergone the following structural adjustments compared to ISO 9239-1:2025.

---Appendix D has been removed.

The technical differences between this document and ISO 9239-1:2025, and the reasons therefor, are as follows.

---The references to the terms and definitions in the introductory text have been changed to the normative references in GB/T 5907.1, GB/T 5907.2, and GB 8624 replaces ISO 13943

(see Chapter 3) to adapt to my country's technical conditions;

---The requirements for thermocouple implementation standards have been changed, replacing IEC 60584-1 with the normatively referenced GB/T 16389.1-2018.

(See 5.11), to conform to my country's actual situation;

---The requirements for the substrate implementation standard have been changed, replacing EN13238 and ISO 14697 with the normatively referenced GB/T 40238.

(See 6.2) to conform to my country's actual situation;

---The description of using a general-purpose adhesive (see 6.3) has been removed to reflect the actual situation in my country;

---The requirements for setting up joints in the patchwork material have been changed (see 6.5) to improve operability;

---The requirements for the specimen conditioning standard have been changed, replacing EN13238 with the normatively referenced GB/T 40238.

ISO 554 (see Chapter 7) is adopted to conform to my country's actual situation.

---A provision has been added that the test can be terminated if the specimen is not ignited or all flames are extinguished within 10 minutes (see 8.2.4) to improve operability.

Actual nature;

---The example report template in Appendix D has been removed to better reflect the actual situation in my country.

The following editorial changes have been made to this document.

---To harmonize with existing standards, the standard name has been changed to "Determination of Combustion Performance of Flooring Materials by Radiant Heat Source Method";

---Adjust the smoke extraction capacity of the smoke extraction system from injection to segment (see 5.8);

---Note A.4 in ISO 9239-1:2025 has been removed.

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).