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

GB/T 47322-2026

**Test method for the fire resistance of cables under the elevated
temperature conditions of a building fire**

建筑火灾升温条件下电缆耐火性能试验方法

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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. 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 of the People's Republic of China. This document was prepared by the National Technical Committee on Fire Protection

Standardization (SAC/TC113) and the National Technical Committee on Wire and Cable Standardization (SAC/TC213). Under the jurisdiction of the relevant authorities. This document was drafted by: Sichuan Fire Research Institute of the Ministry of Emergency Management, Shanghai Cable Research Institute Co., Ltd., and Jiangsu Hengtong Power Cable Co., Ltd. The company, China Northeast Architectural Design & Research Institute Co., Ltd., East China Architectural Design & Research Institute Co., Ltd., and China Southwest Architectural Design & Research Institute have Limited Company, China Northwest Architectural Design & Research Institute Co., Ltd., Guangzhou Aotong Wire & Cable Co., Ltd., Chongqing University, Jiangsu Shangshang Cable Group New Materials Co., Ltd., Far East Cable Co., Ltd., Shanghai Qifan Cable Co., Ltd., Shangwei Co., Ltd., Zhejiang Wanma Co., Ltd. Limited Liability Company, Mingda Cable Group Co., Ltd., Shanghai Pudong Wire & Cable (Group) Co., Ltd., Wuxi Jiangnan Cable Co., Ltd., Baosheng Technology Innovation Co., Ltd., Guangzhou Nanyang Cable Group Co., Ltd., TBEA (Deyang) Cable Co., Ltd., Sichuan Xindian Cable Co., Ltd. Limited Liability Company, Xi'an Jiaotong University, Yuancheng Cable Co., Ltd., Jusheng Electric Co., Ltd., Guangdong Nanlan Cable Co., Ltd., China Southern Power Grid Co., Ltd. Ultra-High Voltage Transmission Company, State Grid Anhui Electric Power Research Institute, Sichuan Xinrong Cable Co., Ltd. Limited Liability Company, Guangzhou Xinxing Cable Industry Co., Ltd., Sichuan Meihe Cable Technology Co., Ltd., Anhui Yuce Technology Co., Ltd., Xinyate Cable Co., Ltd., China Quality Certification Center Co., Ltd., and TÜV Rheinland Testing & Certification Services (China) Co., Ltd. The main drafters of this document are. Feng Jun, Liu Cheng, Tu Jiankun, Hu Linming, Guan Xinyuan, Tang Yong, Yang Hongjun, Wang Bin, Du Yiwei, Xue Xiao, and Yang Nanyan. He Yan, Liu Xiongjun, Zhou Feng, Gao Zuohai, Shen Zhifei, Lu Zhengrong, Xing Taiwen, Chen Wei, Ma Zhuang, Yang Jian, Wang Zhihui, Song Mingming, Li Zhun, Bao Guanghong Liu Ying, Wang Bo, Zhang Zheye, Ke Zhixin, Tan Weilong, Zhang Jiaqing, Qiao En, Zhou Xin, Xu Qiang, Wang Miao, Han Huifu, Xie Zhiguo, Liu Bo. Fire resistance of cables under temperature rise conditions in building fires Performance test methods Warning. The tests described in this document may involve the use of hazardous voltages and temperatures. Electric shock, high temperatures, and other hazards may occur during the tests. The danger of fire, and the potential generation of toxic or harmful smoke and fumes. Users are responsible for taking appropriate safety and health precautions. During the installation, testing, and post-test cleaning of the specimens, mechanical injuries and operational hazards may occur. Risk. Laboratory staff should strictly follow safety operating procedures and take reliable protective measures.

1 Scope

GB/T 47322-2026 is the Chinese national standard covering how long a cable keeps working in a real fire - tested against the standard temperature curve of a building fire rather than a fixed flame, which is the condition the emergency lighting, the alarm and the smoke

extraction circuits actually face. First edition, in force since 1 October 2026, with the hazardous chemicals cable standard GB/T 47438.5-2026. It was issued on 31 March 2026 and takes effect on 1 October 2026, as a first edition. The document is under the responsibility of the National Fire and Rescue Administration. This page is published from the official record of the 2026 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

This document describes a test method for the fire resistance performance of cables under building fire temperature rise conditions. This document applies to power cables, control cables, and mineral-insulated cables with a rated voltage of 0.6/1kV and below in building fire heating strips. Determination of fire resistance performance of the sample under standard time-temperature curve.

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 700 Carbon Structural Steel

GB/T 9978.1 Fire resistance test methods for building components - Part

3 Terms and Definitions

The terms and definitions defined in JB/T 10216-2025, as well as the following terms and definitions, apply to this document.

3.1 test sample Cable segments cut from finished cables for testing.

3.2 cable tray An assembly consisting of a base plate and side plates that are integral with the base plate, or consisting of side plates connected to the base plate.

Note. Cable trays with ventilation holes on the base are perforated cable trays, while those without ventilation holes are non-perforated cable trays (also known as cable troughs). The structure of a cable tray includes corrugated reinforcement. Strong structure, reinforced structure, flat plate structure, etc. [Source: JB/T 10216-2025, 3.3]

3.3 testpiece An assembly consisting of multiple test specimens installed in a non-porous tray as required by regulations, and the non-porous tray itself.