

STANDARD INFORMATION

Standard: UL 521

Standard ID: Heat Detectors for Fire Protective Signaling Systems [UL 521:1999 Ed.7+R:28Feb2023]

Previous Standard ID: Heat Detectors for Fire Protective Signaling Systems [UL 521:1999 Ed.7+R:26Jul2022]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **February 28, 2025**

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: Per our accreditation, Intertek is required to review reports against the standard revisions to confirm compliance. Once compliance is confirmed, the standard reference in the report is updated to show continued compliance to the technical requirements of the standard. Reports not updated to this version by the effective date above will be withdrawn.

Overview of Changes: Flame test alignment with other detector and alarm standards. Specific details of new/revise requirements are found in table below.

Current Listings Not Active? – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records. We will do this at no charge as long as Intertek is notified in writing prior to the review of your reports.



STANDARD INFORMATION

CLAUSE	VERDICT	COMMENT
9	Info	Materials
		<i>New clause added;</i>
		Polymeric material used for an enclosure shall comply with the following requirements:
9.6		a) Enclosures containing parts including a risk of fire – minimum flammability rating of: 1) 5VA; or 2) V-0 and compliance with the Flame test – 127 mm (5 in), 47.3B.
		b) Enclosures containing power-limited circuits with a voltage not exceeding 30 volts AC, 42.4 volts-peak, or 60 volts DC – minimum flammability rating of: 1) V-2; or 2) HB and successful completion with the Flame test – 19 mm (3/4 in), as described in 47.3A.
		c) Enclosures containing circuits with a voltage not exceeding 30 volts AC, 42.4 volts-peak, or 60 volts DC – minimum flammability rating of HB and compliance with the Flame Test 19 mm (3/4 in), as described in 47.3A; and
		d) Enclosures containing circuits powered by batteries with energy limited to 15 watts – minimum flammability rating of HB.
		<i>New clause added;</i>
9.7		For 9.6, Flammability ratings are defined in the Standard for Tests for Flammability of Plastic Materials for Parts in Devices and Appliances, UL 94.



CLAUSE	VERDICT	COMMENT
47	Info	Tests on Polymeric Material
47.3	Info	<i>Section deleted;</i> Flame test
		<i>New section added;</i> Flame test – 19 mm (3/4 in)
47.3A		When equipment is tested as described in 47.3A.2 – 47.3A.6, the material shall not flame for more than 1 minute after two 30-second applications of a test flame, with an interval of 1 minute between applications of the flame. The sample shall not be completely consumed. See standard for details.
		<i>New section added;</i> Flame test – 127 mm (5 in)
47.3B		When equipment is tested as described in 47.3B.2 – 47.3B.5, all of the following results shall be obtained: See standard for details.