

STANDARD INFORMATION

Standard: UL 217

Standard ID: Smoke Alarms [UL 217:2020 Ed.9+R:08May2024]

Previous Standard ID: Smoke Alarms [UL 217:2020 Ed.9+R:07Oct2022]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **June 8, 2026**

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 Reports not updated to this version by the effective date above will be withdrawn.

This SUN only applies to reports listed to the 9th edition.

Overview of Changes:

- Field Testing with Integral Self-Test
- Battery Powered Primary or Secondary Units
- Impact Test
- Drop Test
- Commercial Vehicle Marking Requirements
- Battery Test Requirements
- Markings and Installation Instructions

Specific details of new/revise requirements are found in table below

Note: If the listing references a Canadian standard, per the Canadian Electrical Code (CSA C22.2#0) Section titled Language of markings, Caution and Warning Markings shall be in English and French.

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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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
		<i>Additions to existing requirements are <u>underlined</u> and deletions are shown lined-out below.</i>
	Info	PERFORMANCE
37	Info	General
37.8	Info	Test conditions
		The smoke alarm shall be installed in an environment so as to permit accurate monitoring of the conditions in (a) – (f). Unless otherwise specified, the following conditions shall be established and maintained throughout the test:
37.8.1	Info	a) Ambient temperature at $23 \pm 3^{\circ}\text{C}$ ($73.4 \pm 5^{\circ}\text{F}$) or a higher temperature if specified by the manufacturer, b) Relative humidity at 50 ± 20 percent, c) Oxygen concentration at 20.9 ± 1 percent, d) Barometric pressure of 760 ± 30 mm of mercury (101 ± 4 kPa), and e) Supply voltage, if applicable, adjusted to 100 percent of rated input voltage., and <u>f) Applicable to multi-criteria smoke alarms that incorporate gas sensors – air movement in the test chamber shall be within 16.0 ± 7 fpm (0.08 m/s).</u>
		<i>New clause added;</i>
37.8.2		The multi-criteria smoke alarms that incorporate gas sensors shall be installed in a chamber, constructed so as to permit accurate monitoring and control of chamber air temperature and humidity and oxygen and manufacturer’s specified gas concentration(s).
41	Info	Electrical Supervision Test
41.5	Info	Battery powered (primary or secondary) smoke alarms
		<i>New clause added;</i>
41.5.6		Primary power for smoke alarms intended for use in commercial vehicle cabins shall be provided with a permanently sealed, non-replaceable battery installed within the smoke alarm, and not from an external AC or DC power source.
48	Info	Stability Tests – Multi-Criteria Smoke Alarms Incorporating Gas Sensor(s)
		<i>New clause added;</i>
48.4		All gas sensors shall be subject to the tests defined in the One Year (minimum) Sensor Stability Test for Gas Sensors specified in the Standard for Gas and Vapor Detectors and Sensors, UL 2075.



CLAUSE	VERDICT	COMMENT
		<i>New section added;</i>
		Impact test (Commercial and Recreational Vehicles Only)
83A		A smoke alarm intended for use in commercial vehicle cabins or recreational vehicle shall be subjected to the requirements outlined in 83A.2 – 83A.4. See standard for details.
86	Info	Field Service Tests (If recommended by the manufacturer)
86.1	Info	Go/no-go field test
		<i>New section added;</i>
		Smoke entry and functional test as integral self-test – with or without aerosol stimuli (for the smoke sensor)
86.1.3		The following requirements apply to smoke alarms that employ an integral smoke entry and functional field test feature. The manufacturer shall: See standard for details.
		<i>New section added;</i>
		Marking Permanence
99A		Markings affixed to a smoke alarm shall be sufficiently durable as to resist the deleterious effects of handling, cleaning agents, and the like, expected in the intended use. See standard for details.
	Info	INSTRUCTIONS
101	Info	General
		<i>New clause added;</i>
		Detailed information shall be provided regarding the Smoke Entry and Functional Test means as defined in 86.1 and 86.1.3. Typical information that shall be provided (when applicable) includes:
101.6		a) Brief description of operation of the Smoke Entry and Functional Test means; b) Instructions on how to operate Smoke Entry and Functional Test and what test results can be expected and where they can be evaluated; c) Explanation how the traditional “canned smoke” methods are used in conjunction with this test. Note: Information is permitted to be provided in the control panel published instructions if the test is initiated from the control unit.