STANDARDS UPDATE NOTICE (SUN)
ISSUED: September 24, 2025

STANDARD INFORMATION

Standard: UL 268 / ULC 529
Standard ID:
Smoke Detectors for Fire Alarm Systems [UL 268:2023 Ed.8+R:28Apr2025]
Smoke Detectors for Fire Alarm Systems [CAN/ULC 529:2023 Ed.5+R:28Apr2025]
Previous Standard ID:
Smoke Detectors for Fire Alarm Systems [UL 268:2023 Ed.8+R:17Sep2024]
Smoke Detectors for Fire Alarm Systems [CAN/ULC 529:2023 Ed.5+R:17Sep2024]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **September 30, 2028**

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 Reports not updated to this version by the effective date above will be withdrawn.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

- Battery Tests – Lithium Metal Type
- Identify Annex F as Normative

Specific details of new/revised 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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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
		Additions to existing requirements are <u>underlined</u> and deletions are shown ~~lined out~~ below.
31	Info	**Electrical Supervision Test**
31.4	Info	**Battery powered units**
31.4.2A		***New clause added;*** For detectors that use batteries other than carbon-zinc or alkaline and whose design internally latches the low battery trouble signal, the detector is permitted to be energized by a single cell or multi-cell battery pack that has been depleted to the trouble signal level identified in 50.2.1A. It is not prohibited for the battery voltage to rise back above the trouble threshold after the load is removed. NOTE: Some detectors use multiple battery cells connected either in series or parallel with or without additional external components such as diodes forming a multi-cell battery pack. The individual cells may or may not be user replaceable. The "low battery" voltage of interest is the output of the multi-cell battery pack, not any individual cell.
50	Info	**Circuit Measurement Test**
50.2	Info	**Battery trouble voltage determination**
50.2.1A		***New clause added;*** In lieu of the requirements of 50.2.1, for batteries other than carbon-zinc or alkaline, a decrease in terminal voltage of a battery employed as the primary source of power to a detector shall not impair operation for an alarm signal before a trouble signal is obtained.
50.2.1B		***New clause added;*** In lieu of 50.2.2 to 50.2.4 it is permitted for non-carbon-zinc and non-alkaline batteries that the manufacturer identifies the low-voltage level that results in a battery trouble signal. This low-voltage level is the output of either a single cell or multi-cell battery pack.

CLAUSE	VERDICT	COMMENT
76	Info	**Audibility Test (for Detectors with Integral Sounders)**
76.2	Info	**Sound output measurement**
76.2.4A		***New clause added;*** In lieu of the requirements of 76.2.4, it is permitted that a detector, powered by batteries other than carbon-zinc or alkaline, be energized by a single cell or multi-cell battery pack that has been depleted to the trouble signal level identified in 50.2.1A for the period of 1 year minimum (or claimed battery life greater than 1 year).
76.2.5A		***New clause added;*** For batteries other than carbon-zinc or alkaline, it is permitted that the equivalent of a battery be identified as a voltage source adjusted to a level at which a trouble signal is obtained during the normal standby condition. The voltage used is to be that which was determined during Section 50, Circuit Measurement Test.
78		**Battery Tests**
78.1		When a battery is employed as the main source of power for a smoke detector, it shall provide power to the unit under intended ambient conditions for at least 1 year in the standby condition (hourly supervisory transmission), including weekly alarm testing, and then operate the detector for a minimum of 4 min of alarm followed by 7 days of trouble signal. See Battery-powered units, 31.4. The manufacturer shall provide the following documentation which details the power consumption and battery capacity for the detector: a) Maximum current draws under the detector's normal standby condition and alarm condition under the intended ambient conditions; and b) Rated normal and actual capacities of the battery or battery pack.
Annex F		***Annex F was previously an informative annex, and is now normative;*** **TYPICAL AIR DUCT DETECTOR TEST FACILITY (CANADA ONLY)** See standard for details.