STANDARDS UPDATE NOTICE (SUN)
ISSUED: August 10, 2023

STANDARD INFORMATION

Standard: UL 217
Standard ID: Smoke Alarms [UL 217:2020 Ed.9+R:07Oct2022]
Previous Standard ID: Smoke Alarms [UL 217:2020 Ed.9+R:09Feb2022]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **June 30, 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 Reports not updated to this version by the effective date above will be withdrawn.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:

- Alarm Silence Feature
- Instructions for Determining a Reliability Prediction for Smoke Alarms

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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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 underlined and deletions are shown ~~lined out~~ below.
13	Info	**Alarm Silencing Feature**
13.1		Each smoke alarm shall be provided with an automatically resettable alarm silencing means that has a fixed or variable time setting which desensitizes the alarm for a maximum of 10 minutes. Alarm silencing shall not disable the smoke alarm. Sensitivity shall not be reduced ~~to a level that is less than~~ to less than 125 % of the manufacturer's minimum sensitivity setting test group as determined from the Uniformity of Operation minimum sensitivity defined in 42.6.1(b). Each alarm shall produce a distinctive audible or visible trouble signal while in the silence mode. Following the silenced period, the alarm shall restore automatically to its intended operation. Silencing of one alarm of a multiple station system shall not prevent an alarm operation from the other alarms in the system. See Section 40, Alarm Silenced Test. NOTE: For example, a smoke alarm with a minimum sensitivity (smoke box sensitivity as specified in Section 42, Sensitivity Test) of 4 %/ft may have its sensitivity reduced to 5 %/ft during the alarm silence period.
Annex C	Info	**INSTRUCTIONS FOR DETERMINING A RELIABILITY PREDICTION OF ELECTRONIC COMPONENTS AND MICROELECTRIC CIRCUITS**
C0		***New section added;*** **Instructions for Determining a Reliability Prediction for Smoke Alarms**
C0.1		Make a list of every component in the alarm.
C0.2		By circuit analysis or experimentation, determine the effect of any failure mode (short or open) of each component on the alarm operation and the rationale for the decision. This will determine if a component is to be considered critical, conditionally critical, or noncritical.
C0.3		A component is considered noncritical if all failure modes of the component will result in a trouble signal[a] or have no effect on the intended operation of the alarm for alarm and trouble signals and will not affect the alarm sensitivity.
C0.4		A component is considered critical if two or more failure modes of the component, which will affect the intended operation or the sensitivity of the alarm, do not result in a trouble signal[a].

CLAUSE	VERDICT	COMMENT
C0.5		A component is considered conditionally critical if only one failure mode of the component will affect the intended operation or the sensitivity of the alarm and does not result in a trouble signal[a]. [a] A trouble signal may be indicated by energization of an audible signal, energization of a separate visual indication (amber or orange), or de-energization of a power-on light. If a visual indication is depended on to denote a trouble condition, it shall have a documented predicted failure rate of not greater than 2.5 failures per million hours.
C0.6		Make a list of all critical and conditionally critical components in the alarm.
C0.7		For each critical and conditionally critical component, the expected failure rate, based upon a minimum confidence factor of 60 percent, may be determined from the screening burn-in or published component reliability data method.
C0.8		For each conditionally critical component, the expected failure rate may be determined by calculating only the failure rate for the mode meeting the conditions of C0.5 or by applying a 0.75 multiplying factor to the value determined by the PARTS COUNT or PARTS STRESS ANALYSIS method described in MIL HDBK 217F.