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STANDARDS BULLETIN 2013-5

CAN/ULC-S302-M91 Installation and Classification of Burglar Alarm Systems for Financial & Commercial Premises, Safes and Vaults

INTERPRETATION OF REQUIREMENTS ON IONIZATION TYPE SMOKE DETECTORS (CLAUSE 9.1.3.1)

The following is an interpretation of Clause 9.1.3.1 of CAN/ULC-S302-M91, Installation and Classification of Burglar Alarm Systems for Financial & Commercial Premises, Safes and Vaults, by the ULC Subcommittee on Installation of Security and Burglar Alarm Equipment & Systems. These interpretations are being issued in response to requests for interpretations received by ULC Standards.

Issue:

Clause 9.1.3.1 of CAN/ULC-S302-M91, states:

9.1.3.1 *An ionization type smoke detector shall be installed on the ceiling of the vault or compartment as least 0.5 m from any wall and not more than 6 m from any wall.*

Background:

It was brought to the attention of ULC Standards that there is a depleting supply of ionization type smoke detectors. Alarm installing companies have raised a concern that due to limited availability of ionization type smoke detectors, continued compliance with CAN/ULC-S302-M91 would be jeopardized.

It was requested that either type of smoke detector be acceptable (photoelectric or ionization). This intent is consistent with the Draft 2nd Edition of CAN/ULC-S302 (to be released shortly), which would allow the use of either type of smoke detector in order for the standard to be performance based.

Questions:

In an effort to address this issue in the existing edition of this standard (i.e. CAN/ULC-S302-M91), answers to the following questions were requested:

Q1 – Are you aware of any documented evidence that supports the restriction in CAN/ULC-S302-M91 which specifically allows the use of ionization type smoke detectors only and not other types?

Q2 - If No to Q1, would the use of photoelectric type smoke detectors be acceptable in CAN/ULC-S302- M91 in lieu of ionization types? (Note that a Yes response would align with the intent of the Draft 2nd edition of this Standard).

Interpretation by the ULC Subcommittee on Installation of Security and Burglar Alarm Equipment & Systems:

Response to Q1: No.

Response to Q2: Yes.

Rationale:

The subcommittee members were not aware of any documented evidence that supports the restriction in CAN/ULC-S302-M91, to specifically allow only ionization detectors. According to subcommittee members, the original specification was based on the assumption of the ionization detectors performing better to detect thermal attacks. There were no follow up tests conducted to establish scientific evidence.

As a result, subcommittee members concurred that the use of photoelectric type smoke detectors would be acceptable in CAN/ULC-S302- M91 in lieu of ionization types.

Should you require additional information, please contact Valara Davis at (919) 549-0921 or by email at Valara.Davis@ul.com.

Yours truly,
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