

Updated ULC Requirements

Recently, two new standards have been issued by ULC . CAN/ULC S561-03 is titled "Installation and Services for Fire Signal Receiving Centres and Systems". It has been developed on the basis of the ORD/C693 document and updates the requirements for performance of the monitoring centre (which is now called the "Fire Signal Receiving Centre") and the performance requirements of the alarm signaling and receiving equipment.

The other new standard, CAN/ULC S559-04 entitled "Equipment for Fire Signal Receiving Centres and Systems" clarifies the requirements for the construction and functionality of a Fire Alarm signal transmitter.

The Fire Alarm Monitoring industry is now clearly defined by two standards, a performance standard and a hardware standard. These standards remove Fire Alarm signalling from other types of alarms that are transmitted and received, and set it apart as a service separate and distinct.

Both CAN/ULC S561 and CAN/ULC S559 discuss fire alarm signalling in sections 10 and 5 respectively. From the hardware point of view, alarm signals must be reliably communicated with either appropriate repetition and/or parity that "...provides a certainty of 99.99% that the received message is identical to the transmitted message". It goes on to specify that, "The integrity of all communication systems and communication channels, including redundant channels, shall be monitored at the Fire Signal Receiving Centre."

When it comes to describing the different types of signal communication systems, both standards categorize these systems into two categories, Active Communication Systems and Passive Communication Systems. As one might expect, the Active system is typified as a single technology which is capable of reporting a failure of any part of the system within 180 seconds of the occurrence of the fault. A typical example of this type of system is the DVACS® network discussed above.