



New Ontario Building Code – Changes to Impact the Monitoring of Fire Alarms

Introduction

The purpose of this document is to assist fire departments and other AHJ's in understanding the changes that will be required in the monitoring of fire alarm systems in premises which must be monitored on a 24-hour basis for fire. Amendments to the National Building and Fire Codes, released in 2005, will now require such buildings to be monitored in accordance with CAN/ULC-S561-03 standards. New versions of the Ontario Building and Fire Codes, intended to mirror the changes in the national codes, are being finalized.

New Ontario Building Code Effective December 31, 2006

Following the release of the revised National Building Code, the Ontario Government has announced that the new version of the Ontario Building Code (OBC) will come into effect on December 31, 2006. The new OBC will be written in an objective-based format, and will contain over 700 technical changes. The objective based format will allow for more flexibility and technical innovation in the design and construction of all aspects of a building.

New National Codes Clarify Earlier Confusion

A misconception that the revisions to the National Building and Fire Codes addresses is the belief that because a monitoring station has a ULC listing, the premises being monitored is also being monitored in accordance with ULC requirements. Unfortunately, this is not always the case. For example, a monitoring station can have 3 ULC-compliant systems and gain a ULC listing, but may also have numerous other systems which are not being monitored in accordance with ULC specifications. The new national codes clarify that premises requiring 24-hour monitoring as prescribed by the Codes must be monitored to CAN/ULC-S561-03 standards.

New Ontario Building Code (OBC) Will Reference CAN/ULC-S561-03

The new OBC (see Section 3.2.4.7) stipulates that newly-constructed buildings that are required to be monitored for fire by a third party shall be monitored "by way of...signals to a central station conforming to CAN/ULC-S561, "The Installation and Services for Fire Signal Receiving Centres and Systems"". The reference to CAN/ULC-S561-03 will replace the reference to ULC/ORD-C693-1994. While the wording is slightly different from that used in the NBC, the intention is the same: to ensure that premises are monitored in accordance with CAN/ULC-S561-03. To avoid any confusion, we would urge Fire services to require ULC certificates at the protected premises building site in order to ensure full compliance. A

similar recommendation was made in the OFM's 1995 Communique on Fire Alarm Monitoring Services.

How to be Certain: Require a ULC Certificate at the Protected Premises

The requirement of a ULC certificate near or adjacent to the fire alarm monitoring system on the protected premises will leave absolutely no doubt as to whether the fire alarm system is being monitored in accordance with the new ULC requirements. The concept of a ULC certificate on site is not a new one: the Ontario Fire Marshal's office stipulated it as an option in a 1995 Communique entitled "Fire Alarm Monitoring Services", #95-005.

Ontario Fire Code Changes Expected to be Announced in 2007

The Ontario Fire Code (OFC), following the lead of the National Fire Code, has been amended to include the reference to CAN/ULC-S561-03, but the new OFC document has not yet been released. The National Fire Code has chosen to reference the Canadian-based standard CAN/ULC-S561-03 as the sole standardizing body to the fire monitoring industry.

Does the New Building Code Requirement Apply to Existing Buildings?

The new Ontario Building Code applies to newly constructed buildings, and existing buildings undergoing renovations or additions (see Section 1.1.2.7). The changes forthcoming to the Ontario Fire Code will cover the fire alarm monitoring specifications of existing buildings.

Two Key Differences between the New and Old Requirements

There are two principal differences between the new and old requirements:

[1] The first is that under CAN/ULC-S561-03, monitoring stations – or signal receiving centres (SRCs) as they are referred to in the new Standard -- must notify the fire services that a signal has been received at the monitoring station *within 30 seconds of its receipt*. This requirement is found in Section 9.4.4.1.1. Under ORD-C693, there was no specific time limit and the monitoring station was required to notify the fire department "immediately" upon receipt of a fire alarm signal. The CAN/ULC-S561-03 standard also states that:

"Where available, electronic re-transmission of fire alarm signals can be used to satisfy the time requirement in 9.4.4.1.1 (A) in concert with fire signal receiving centre service."

[2] The other requirement is that the fire alarm monitoring panel (the panel that transmits signals from a Fire Alarm Panel to a Signal Receiving Centre, formally referred to as a Monitoring Station or Central Station) must now use either an "Active" form of communication (for example, some form of continuously supervised line) or two "Passive" non-redundant forms of communication; for example, Internet and Cellular, Digital and Cellular, etc. These non-redundant options, however, cannot be offered by the same telecom provider. However, if the SRC chooses to use an Active form of communication, that will satisfy the requirement of the Standard, and no other forms will be required. As a result, dual line dialers cannot be used as the sole means of transmitting the signal.

Some Definitions

Active Communication - a method of communications in which the integrity of the *communication channel(s)* is continuously monitored so as to identify to the fire *signal receiving centre* any fault or failure that could affect signal transmission and reception.

Passive Communication - a method of communication that is not continuously monitored to detect failures or faults, but rather incorporates dual or multiple *communications systems*.

Impact on the Monitoring of Fire Alarm Systems

For buildings impacted by the new references to ULC standards, it means that monitoring stations, a.k.a. signal receiving centres, will be required to deliver details of a fire signal to the fire department *within 30 seconds* from the time it is received at the signal receiving centre. While CAN/ULC-S561-03 does not specify how that information should be delivered to the fire department, it does state that where available, electronic re-transmission of the signal can be used to meet the new requirement (see above). We would suggest that, realistically speaking, electronic communication of the signal to the fire department is the most likely means to successfully comply with the new requirements. OPEN ACCESS™ is one option for electronic re-transmission.

What That Means for the Fire Services

The enforcement of these new requirements will represent a challenge in the beginning. One option which the fire services should consider is to require ULC certificates on premises subject to the new Ontario Building Code provisions. As the Authority Having Jurisdiction (AHJ), it is well within the mandate of the fire department to require these certificates. While the production of a ULC certificate is not mandatory under the revisions to the OBC, requiring a certificate has several potential advantages for the fire department:

- ensures that the installation of the fire alarm monitoring system at a particular premises (as opposed to the fire alarm system itself) conforms to the ULC requirements stipulated in CAN/ULC-S561-03 and CAN/ULC-S559-04;
- puts additional “eyes and ears” on the street in the form of ULC inspectors and assists fire inspectors with respect to ensuring compliance.

What is covered by a ULC Certificate?

The ULC issues a certificate for the premises fire alarm monitoring system based on compliance to a combination of standards including but not limited to, CAN/ULC-S536-04, CAN/ULC-S537-04, CAN/ULC-S559-04 and CAN/ULC-S561-03. The certificate must be placed beside the fire alarm monitoring panel at the premises being monitored.

Who is responsible for issuing ULC certificates?

In the event a ULC certificate is required, the alarm monitoring company will apply to the ULC office for the certificate, (provided it is a ULC listed station for fire) and will be responsible for delivery of the certificate to the customer.

Is there Additional Cost for the Premises Owner to Comply?

There will likely be some additional cost to monitor the system – a few dollars more per month – if the premises owner elects to choose electronic re-transmission, where that service is available. If the Fire Department begins to ask for ULC certificates on the monitoring panel demonstrating compliance with the new Code requirements, there will also be an additional annual cost associated with this certificate. An equipment upgrade may also be necessary depending on the type and age of the fire monitoring panel, although these would be one-time costs, and would require a site visit by a qualified CFAA technician to determine.

For more information, please visit:

www.fire-monitoring.com, or www.openaccess.ca, or call 1-800-263-2534

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