

Monitoring of Fire Alarm / Sprinkler systems

When a Fire Alarm system sounds: Who will call the Fire Department?

It should not be a surprise that most building managers can't answer this question with certainty each and every time.

The 2006 Ontario Building Code states:

3.2.4.7. Signals to Fire Department

(1) If a fire alarm system is required to be installed and a single stage system is provided, the system shall be designed to notify the fire department in conformance with Sentence (4) that an alarm signal has been initiated in,

(d) a building regulated by the provisions of Subsection 3.2.6., or (18 m in height or more)

(2) A fire alarm system that includes waterflow indicating devices shall be designed to notify the fire department, in conformance with Sentence (4), that an alarm has been initiated.

(4) Notification of the fire department required by Sentences (1) to (3) shall be by way of,

(a) signals to a central station conforming to CAN/ULC-S561, "Installation and Services for Fire Signal Receiving Centres and Systems", or

(b) the municipal fire alarm system.

(5) Where a single stage fire alarm system is installed in a building that is not sprinklered, and Sentence (1) does not apply, a legible notice, that is not easily removed, shall be affixed to the wall near each manual pull station stating,

(a) that the fire department is to be notified in the event of a fire emergency, and

(b) the emergency telephone number for the municipality or the telephone number of the fire department.

I have quoted only the sections that relate to residential buildings and as you can see it is rather complicated. Let's see if I can simplify the previous section.

Please review and check the following items:

- There is a sprinkler in the building
- The building height is greater than 18m

If you checked either of the two conditions then you need to monitor your fire alarm / sprinkler system. Monitoring ensures that someone is notified of the alarm / trouble conditions in a short period of time. It all comes down to timing. I will explain further....

Sprinkler

When a sprinkler system is in use and discharges the water can cause a lot of extra damage to a building and its contents. Monitoring can save the building from extensive floods, frozen pipes. Most sprinkler systems include equipment that will monitor the systems overall status. Monitoring also ensures that you will know if someone tampers with the sprinkler system.

Buildings covered by 3.2.6.

This section of the building code covers higher buildings. By the mass alone, higher buildings mean more people. The more people within a building: the greater the importance for automatic notification of the Fire Department in the event of an emergency. We know from years of experience that minutes and sometimes even seconds can mean the difference in an emergency.

ULC Listed Monitoring

It is becoming more common for the local authority to require that the system be certified by ULC. This gives assurance that the system will be installed and maintained at the ULC standard. For this type of monitoring, you will need a special company that is also registered with ULC to do so. For many years the only solution for this type of monitoring has been DVAC. DVAC is possibly the most costly type of monitoring available today. If you have expensive DVAC monitoring; the good news is that now there are ways to save money... See the article "DVAC no more".

Thinking long term Monitoring of your systems is one of the best investments you can make in your properties.

John MacDonald.....