

Agrichemical Warehousing Standard Association
WAREHOUSING STANDARDS BULLETIN

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Protocol B26–Fire Detection System

**Protocol B-26 is based on the 1995 Building Code
Section 3.2.4 – Fire Alarm and Detection Systems**

Historically, Fire Alarm Systems have proven their worth by providing early detection of fires and greatly improving reaction times. The application of this section of the building code varies based on the type or occupancy, adjoining occupancies, occupant load, and several other factors. The AWSA Protocol B26 requires the installation of a monitored fire alarm system for the agri-chemical storage area as well as the entire building in which it is housed.

This requirement is based on Section 3.2.4.2 of the Building Code, entitled **Continuity of Fire Alarm System**, and states in 3.2.4.2.3, “*If a fire alarm system is required in any portion of a building, it shall be installed throughout the building.*”

Fire alarm systems can be made up of many different types of detectors, annunciators, auto dialers, and may vary from water flow alarms in a protected facility to smoke and heat detectors of various types in non-protected facilities. For Auditors and building owners/operators to determine the application and effectiveness of a fire alarm system can be a difficult task. In instances where it is not readily apparent that an adequate system exists, auditors can accept a written statement from the alarm installation company that states one of the following:

1. “The system installed at _____ is in conformance with the National Building Code of Canada.”
2. “The system installed at _____ is in conformance with CAN/ULC-S537-M, Standard for the Verification of Fire Alarm Systems.”

Note: In certain circumstances, exception are permitted. When referring to warehouses as part of a multi-purpose building, such warehouses could be

(a) located within the building, and called “rooms,”

or

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(b) “attached structures” – to the exterior of the building.

In case a), that is a “room” within a building, the entire building requires a fire detection system to meet the National Building Code, unless the interior walls of the “room” are 4 hour fire rated and any enclosure and frame is rated at 3 hours. In this case, no additional monitoring is required other than the warehouse “room” itself.

In case b), that is an “attached structure,” the only two exceptions are as follows:

1. If the adjoining wall(s) is 4 hour fire resistance rated and any closure and frame is rated at 3 hours, then no additional monitoring is required other than the warehouse itself.
2. If the adjoining walls are 2 hour fire resistance rated with no openings in the adjoining wall(s), no additional monitoring is required other than the warehouse itself.

Self Monitoring:

Some newer systems have been set up to immediately sends out an e-mail, phone call and SMS text to designated company responders. Therefore, it allows each individual site the ability to immediately see any movement or action if the alarm is triggered and respond accordingly.

If triggered, the alarm continues to sound and alert site respondents until the alarm is manually shut off.

For these systems to be approved for use,

The system must be installed to ULC code requirements such as fire detection ULC-S524 Installation of fire systems and ULC-529 Heat detectors or ULC531 Smoke detectors (if applicable). This should have been provided at the time of installation.

The system should be compliant with ULC-561 Fire alarm monitoring. This is the standard requirement for communications to key site staff and the emergency response personnel in the specific jurisdiction.

The company providing the monitoring service should be able to provide this information.

Documentation from the manufacturer is required.

Further you will need to provide your auditor evidence that:

- a) Evidence that the system is being maintained as per manufacturer instructions.
- b) The system should be inspected and tested annually as per manufacturer installer instructions (see ULC S536 Inspection and Testing).