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MAINTENANCE OF FIRE PROTECTION DEVICES WITHIN RESIDENTIAL SUITES OF MULTI-FAMILY BUILDINGS

BACKGROUND:

Fire protection service companies are having problems accessing fire protection devices located in the private dwelling space of multi-family buildings such as condominiums. Service companies that cannot access devices in condominium suites identify this as a deficiency in their annual test report. These reports indicate to fire officials that the building fire protection and life safety systems are not being properly maintained in accordance with the Fire Code and referenced standards.

Multi-family residential condominium buildings are generally constructed in two basic styles:

- i. Apartment style with public corridors, and
- ii. Townhouse style with separate entrances and exits.

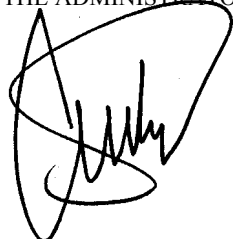
Apartment style buildings will normally have a complete fire alarm and fire protection system. Townhouse style buildings will have basic smoke alarm and residential sprinkler protection. Older buildings may not have any sprinkler protection.

Accessing Private Dwellings

Each suite of a condominium building is considered a single family dwelling with a separate owner responsible for the operation and maintenance of the unit. Some condominiums are operated under a Management Board that is responsible for the overall building operations. Service companies dealing with Management Boards can usually arrange access to all core-building systems and to a majority of individual suites. Follow up inspections can be conducted to obtain full compliance.

Strata-title developments do not come under the Condominium Act and may not have a Management Board responsible for the maintenance of building facilities. Safety code officers (SCO) and service companies may have a more difficult time finding the person responsible to arrange access to all core-building systems and suites.

ISSUE OF THIS INFORMATION BULLETIN IS
AUTHORIZED BY THE ADMINISTRATOR.



C.M. TYE



SAFETY CODES COUNCIL



The Safety Codes Act (SCA) and the Alberta Fire Code (AFC) establish the owner as being the party responsible for maintaining the fire protection and life safety systems of a building. The SCA makes provisions for a SCO to access a private dwelling with either the consent of the owner or occupant, or with a warrant from a justice. To enforce the provisions of the Act a SCO may have to issue orders to individual dwelling owner. This is obviously not a reasonable approach to achieve the annual maintenance of building systems.

The SCO has the ability to accept alternatives and longer intervals between inspections and tests provided the SCO is satisfied the measure will address the expected degree of safety. Good cooperation between the owner and SCO will generally determine acceptable maintenance procedures for fire protection and life safety systems.

CODE REQUIREMENT:

Article 1.1.1.1. Responsibility

1) Unless otherwise specified, the owner shall be responsible for carrying out the provisions of this Code.

1.1.2.3. Alternatives (See Appendix A.)

2) Alternatives to requirements in this Code not within the scope of Sentence (1), may be permitted provided

- a) a degree of life safety acceptable to the authority having jurisdiction is provided by existing fire protection measures, or
- b) measures are taken to provide a degree of fire safety that is acceptable to the authority having jurisdiction.

1.1.2.4. Intervals between Inspections and Tests

1) Longer intervals between the inspections and tests specified in this Code may be permitted provided the authority having jurisdiction is satisfied that such intervals do not reduce the reliability of the system or equipment requiring inspection or testing.

Article 6.1.1.2. Maintenance

1) **Fire** protection installations shall be maintained in operating condition. (See Appendix A.)

Article 6.3.1.2. Inspection and Testing

1) Fire alarm systems shall be inspected and tested in conformance with CAN/ULC-S536-M, "Inspection and Testing of Fire Alarm Systems."

Article 6.5.3.1. Testing

1) Except as otherwise required in this Section, the testing and maintenance of sprinkler systems shall be in conformance with NFPA 25, "Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems."

APPLICATION:

The Fire Code requires qualified persons to perform the annual maintenance of fire alarm systems, portable fire extinguishers and special fire suppression systems. The manufacturer's representative or sprinkler contractor normally services sprinkler systems and standpipe and hose systems. The SCO, building owners or occupants need to establish a preventative maintenance plan to accommodate this requirement. Buildings with a fire alarm system are required to have a fire emergency plan that addresses inspection and maintenance of fire protection and life safety systems. Owners have the responsibility to hire qualified persons to maintain building safety systems and provide access for persons performing the work.

SCO'S RESPONSIBILITY:

A SCO can accept longer intervals between inspections and tests of fire protection systems as long as they are satisfied with the overall reliability of the system. There are many factors a SCO should consider before extending test intervals but this should not discourage them if there is good cooperation from the owners and service agencies. Factors to consider are:

- i. Age of building and systems
- ii. Problems with systems
- iii. Type of systems and the technology in use
- iv. Frequency when all devices are expected to be tested by a qualified person
- v. Cooperation from owners
- vi. Cooperation from testing agencies
- vii. Owners involvement in annual visual inspections

A SCO has authority to accept alternatives to annual testing and can give owners permission to extend the test intervals of fire protection systems or devices. Permission to extend test intervals should be based on an understanding of the reliability of the system being reviewed and that a service agency performs the annual test of core components. Some, but not all, fire alarm systems with new technology can perform self-diagnostics that monitor the condition of all circuits and devices every minute of the day. These types of systems can provide owners and service agencies with accurate information for scheduled maintenance. A SCO can use the merits of these systems to permit longer intervals between inspections and tests without compromising the reliability of the system. It is important to note that some devices in suites may not be electrically supervised or monitored.

OWNERS RESPONSIBILITY:

Each owner in a multi-family building is responsible for the maintenance of fire protection system components within their dwelling unit. Cooperation in providing the SCO and fire protection service companies' access to suite devices is a reasonable way for owners to achieve Code compliance.

An owner can participate by conducting an annual visual examination of devices in their units. Owners should be requested to submit a signed report indicating they have visually examined the device and confirm there is no physical damage, paint, corrosion or objects that would cover up

or otherwise impair the operation of the devices in their unit. The owners' record can be submitted to the service agency to form part of the annual inspection report.

It is important for owners to understand that by performing their own visual annual inspection there is still no guarantee the devices will operate. Similarly, a qualified person can perform the required annual test on a device and have it fail the moment they certify the system as being operational. Only certain suite devices can be tested by an owner provided there is a test feature incorporated with the device. Generally, this applies to a local smoke alarm with a test button feature. It is also important for owners to understand they are not permitted to remove or repair devices within their suite and only service agencies with qualified personnel can perform this work.

The annual visual inspection conducted by an owner should not extend more than 3 consecutive years. Every 4 years the owners should ensure that a qualified service representative performs the annual inspection and test of the devices in their suite.

The following outlines the type of annual testing permitted to be performed by an owner on typical devices in their suites.

Fire Alarm System:

Audible Devices

Audible signal devices include items such as horns, bells, piezoelectric devices or speakers. Annual testing by a qualified person involves a visual check for damage and hearing the device operate once.

An owner can:

- Check to see the audible devices within the suite are not physically damaged, painted, corroded, covered over or tampered with.
- When possible record any occasion where an audible device has operated due to fire alarm system activation or testing.
- Where speakers are installed check they provide an intelligible voice message.
- The owner is capable of initiating and recording a test of an audible device only when the device has a built in manufacturer's test button for this purpose.

Visual Devices

Visual signal devices include strobe lights and light emitting diodes (LED). Annual testing by a qualified person involves seeing the operation of the device once.

An owner can:

- Check to see visual devices within the suite are not physically damaged, painted, corroded, covered over or tampered with.
- When possible record the occasion where visual devices operated due to fire alarm system activation or testing.

- The owner is capable of initiating and recording a test of a visual device only when the device has a built in manufacturer's test button for this purpose.

Detection Devices

Detection devices include items such as local smoke alarms, heat detectors, sprinkler heads. Annual testing by a qualified person will not involve the testing of the local smoke alarm.

Local Smoke Alarm

Testing of the local smoke alarm is the owners' responsibility.

- Test the smoke alarm on a monthly basis using the test button and follow the manufacturer's recommended maintenance procedures. Battery operated smoke alarms should have the battery replaced annually.

Heat Detector

An owner is not permitted to test a heat detector. Annual testing by a qualified person usually involves the application of heat or the removal of the device. A heat detector will initiate a trouble or alarm on the control panel if there is any problem with the circuitry. Electrical supervision of the detector that indicates a trouble signal on the control panel warns owners that the reliability of the system is at risk. Any trouble on a control panel requires the immediate attention of a qualified service contractor.

An owner can:

- Check to see heat detectors within the suite are not physically damaged, painted, corroded, covered over or tampered with.

Sprinkler Head

Annual testing by a qualified person involves a visual inspection of the sprinkler head.

An owner can:

- Check to see sprinkler heads are not physically damaged, painted, corroded, covered over or tampered with

An owner should keep a record of visual inspections and the record should be made available to a fire authority and service agency upon request.

FAILURE TO COMPLY:

Where owners do not cooperate in maintaining fire protection devices, the fire authority can order compliance.