

Vacant and Idle Building Hazards and the Precautions Needed to Minimize Losses

I. Introduction

When business changes or downturn economics result in unoccupied (vacant or idle) buildings, the supervision and maintenance must not be neglected. Otherwise, the potential for property losses will significantly increase. Buildings that are for sale, no longer occupied with business activity or converted to storage of idle or obsolete equipment, should be properly supervised and maintained. If personnel are no longer present to detect leaking or impaired sprinkler systems, inadequate heating or other adverse conditions, property losses may occur. The most significant loss potential can include fire, theft, vandalism, damage from water, collapse of structures due to deterioration and damage from wind and hail. Another negative aspect of vacant and idle buildings is the potential to attract arsonists, vandals, burglars and vagrants.



Programs should be in place to reduce the potential for losses from these hazards.

II. Statistics

According to The National Fire Protection Association (NFPA), a significant number of structure fires occur in vacant or idle properties or properties under construction, demolition or renovation. These frequently result in civilian deaths, injuries and substantial dollar losses in property damage. The leading causes of the fires was reported as intentional fire setting, "open flame, ember or torch," and exposure to another fire. It is likely that some of these fires may have been avoided had increased security measures or programs been in place to manage the vacant and idle facilities

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III. Security

There should be no reduction in the level of supervision provided that was previously in place and in some situations, the level may need to be increased. The aesthetic condition of the property must also be maintained to avoid the attraction of unauthorized entry and vandalism.

If operations are to cease and the facility is to be vacated, management should develop a written plan to ensure fire protection systems remain in-service and security personnel are trained to respond to an emergency. Security personnel will need to take action to mitigate damage and notify appropriate individuals during an emergency.



Security personnel should be furnished with a list of emergency contacts names and a diagram of the fire main system should be available that shows location of sprinkler control valves. When emergency conditions are imminent, such as flood, the security force should be augmented with personnel capable of making decisions to mitigate damage to the building and equipment. Security personnel should be responsible for fire prevention, security and other emergency loss prevention measures including predetermined actions for notification of proper people for weather emergencies (snow accumulations, imminent flooding, etc.). Security personnel should be trained in all the functions of the EO (Emergency Organization).

Other Security Items:

1. **Adequate exterior lighting.** This includes lighting an area of 10 ft. (3 m) on either side of fences, and areas within 40 ft. (12 m) of building entrances. Lights should be roof-mounted or pole-mounted, so they are not easily attacked. Yard storage subject to theft should be in a well-lighted area.
2. **Windows.** Those easily reached from the ground and not fronting main roads should be blocked or protected through a burglar alarm system.
3. **Fences or Barriers.** Fences should be flush with the ground and a minimum of 7 ft. (2 m) in height, with barbed wire at the top tilted toward the outside of the protected area. Barrier systems (walls, barbed tape or concertina, etc.) should provide the same degree of protection.

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4. **Exterior doors.** These should be of substantial construction with adequate locking devices. They should be a minimum of 1 1/2 in. (4 cm) thick, and should be solid wood, wood core with 16 ga. metal facing on the interior, or solid metal. Windows in doors should be force resistant glazing or should be protected by metal grill work. The door frame should also be of substantial construction, well secured to the structure. A heavy dead-bolt lock should be provided, with a bolt that extends at least 1 in. (25 cm) into the bolt receptacle.

IV. Protection

Fire Sprinklers:

Automatic fire sprinkler systems should be maintained and kept in-service for all vacant and idle properties. Please contact Sompo's Risk Control Department prior to removing sprinkler systems from service, if the removal of fire sprinkler systems is under consideration.

The inspections and testing programs for the fire protection equipment should continue while the building is idle. This will include:

1. Weekly test start of the fire pump for diesel engine systems OR monthly churn tests for pumps with electric motors.
2. Monthly inspection of all sprinkler control valves (valves should be locked open with non-breakable locks).
3. Quarterly testing of the sprinkler water flow alarms
4. Annual test of the fire pump and physical operation of control valves.

Alarm Services:

Local alarms sounding water flowing, fire pump running, and fire panel trouble code alarms are considered minimum alarm protection where properties are:

1. Constantly occupied by employees 24 hours per day, 365 days per year in all areas.
2. Adequately monitored by security services, making recorded tours when the property is not in operation or less than fully occupied.

At properties not constantly occupied or not having sufficient security services, alarm systems should be electrically supervised and connected to a fire service, municipal dispatch center, proprietary system, or an FM Approved/UL Listed central station monitoring service. Water flowing and smoke detection alarms should be considered minimum levels of alarm protection. Monitoring for fire pump running, building temperature (low temps) and alarm panel trouble codes is an enhancement and good practice.

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Building Heat:

Maintain at least 40°F (4.5°C) temperature in the building to prevent sprinkler pipes from freezing and allowing wet pipe sprinkler systems to remain in service.

V. Checklist

- Maintain sprinkler systems in operation and keep an inspection and test program.
- Secure the property and limit access by unauthorized personnel.
- Remove unnecessary combustibles from the inside and outside and keep vegetation cut.
- Remove flammable liquids and turn off the utilities that are not needed.
- Monitor all hot work operations with the Sompo Cutting-Welding-Hot Work Permit.
- Advise the fire department of the building's vacant condition and provide access if necessary.
- Maintain building heat at a minimum of 40°F (4.5°C) for wet pipe sprinkler systems.
- Verify that open fire doors are fully operational and that automatic closing devices are installed and operational. Close and latch all fire and smoke doors and maintain in good operating condition.
- Remove or locate outside combustible storage a minimum of 50 feet from the building.
- Make available personnel to assist in emergency situations.
- To assure the above conditions are maintained, conduct recorded weekly inspections.
- Utilize the Sompo Impairment Kit for notification of impaired automatic protection systems.

VI. Assistance

For additional information or assistance in the development and implementation of loss control procedures for Vacant and Idle Buildings to meet the needs of your organization, contact your Sompo International Risk Control Team or email us at: GRSRiskControlQuestions@sompo-intl.com.