# FIRE ALARM GUIDELINES FOR EXISTING R-1 OCCUPANCIES The City of Bremerton

The following guidelines have been established by the City of Bremerton. These guidelines were developed with the understanding that unique conditions in buildings may require special consideration by the authority having jurisdiction.

**Single-station smoke detectors:** Level I, II and III buildings require listed, photoelectric detection devices inside all sleeping areas. Detection devices shall sense visible or invisible particles of combustion.

**Manual fire alarm pull stations:** Listed manual fire alarm pull stations are required in Level II and Level III buildings. At least one manual pull station needs to be provided in each stairwell and is to be located at the common egress level from the building. Concurrent with the stairwell requirement, there is to be a manual fire alarm pull station located not more than one hundred and fifty (150) feet of actual travel distance from any apartment door front.

**Heat detectors:** Listed heat detectors are required in all Level III apartment buildings. The recommended location of the heat detector is near the kitchen, or in the hallway near the bedrooms, however an alternate area may be used when approved by the authority having jurisdiction. The heat detector is to be system-compatible and shall be of a fixed-temperature type with a 135°F temperature rating. *Exception: No heat detector is required in buildings that are protected throughout by an automatic fire sprinkler system, which is designed in accordance with NFPA 13 or NFPA 13-R.* 

**Alarm Indicating Devices:** Listed audible and visual alarm devices are required for Level II and Level III buildings. A strobe device, listed for outdoor use, with a 110 candela output shall be located on the street side of the building in the immediate location of the building address numbers. Audible devices shall be provided and located such that audibility of the alarm signal shall meet NFPA standards. As this is a performance-based standard for design, it shall be incumbent upon the fire alarm system contractor to use calibrated sound measurement equipment to verify that these requirements meet NFPA standards.

**Audibility:** The authority having jurisdiction shall approve Audibility for the alarm system(s).

**Zoning Arrangement:** The authority having jurisdiction will determine Zoning of the alarm system(s).

**Monitoring:** Level II & III buildings will require active monitoring by a U.L. listed central monitoring station. Level I buildings in Bremerton, requiring an alarm system shall also be monitored. (See Alarm Code) At least one owner-provided telephone line shall be connected to a digital alarm communicator transmitter (DACT) when such equipment is used.

**Standby battery calculations**: Fire alarm systems in Level II and Level III buildings shall have standby battery capacity provided which is capable of operating the system in normal mode for 24 hours and, at the end of that period, is capable of operating all alarm notification appliances used for evacuation or to direct aid to the location of an emergency for 5 minutes.

**Fire Alarm Control Panel location:** The fire alarm control panel location shall be determined by the authority having jurisdiction.

**Washington State Dept. of Labor and Industries- Electrical Permit:** These special guidelines and the local ordinance do not exempt the fire alarm system installer from the requirement to obtain a valid permit from the Electrical Inspection Division of the State of Washington Department of Labor and Industries or, where applicable, from a municipality's Electrical Inspection department. The fire alarm installer shall be responsible for obtaining all inspections and approvals from L & I at #360-415-4000

# CITY OF BREMERTON FIRE ALARM CODE

# **Bremerton Municipal Code 18 (B. M. C.)**

#### Section 18.02.070

- (a) Required Installations.
- (1) Genera 1: When required by this section, an approved fire alarm system shall be installed and maintained in a fully operational condition, including 24-hour off-premises monitoring, by a UL listed central station, in all structures, whether occupied or not. The installation and maintenance shall be the responsibility of the building owner.
- (2) Type of System: An autom atic f ire a larm system shall be m aintained in a fully operational condition, with 24 hour off-premises monitoring, and shall be installed in accordance with the following:
  - (i) In all new unsprinklered construction over 4,000 square feet gross floor area.
  - (ii) In all remodels of e xisting unsprinklered buildings over 4,000 square feet gross floor area, when the value of any remodel work exceeds 50 percent of the building's valuation.
  - (iii) In any unsprinklered building over 4,000 square feet gross floor area when a change in occupancy use classification occurs.
  - (iv) In the following occupancy classifications as defined by the Uniform Fire Code:
    - (A) Group A, Divisions 1, 2, and 2.1 occupancies.
    - (B) Group E occupancies with an occupant load of 50 or more persons.
    - (C) Group H occupancies used for the m anufacture of organic coatings, and all Group H, Division 6 occupancies.
- (D) Group I occupancies.
  - (v) <u>In common areas of all multi-family residential units having three or more units which exit through a common interior egress corridor. (Even Level I)</u>
  - (vi) In existing unsprinklered apartment and residential structures three or more floors in height. (Level II & III)
  - (vii) In buildings equipped with fire sprinkler systems, for the monitoring of water flow indication and main water supply shut-off valve tamper switch, and to provide manual sending stations with audibility and visibility.
- (b) General Requirements for Installation:
  - (1) Plans and Specifications: Three complete plans and specifications of all fire alarm systems shall be submitted for review and approval by the Bremerton Fire Department prior to system installation. Plans and specifications shall include, but not be limited to, a floor plan, type and location of all initiating devices, control and trouble signaling equipment, annunciation, power connection, battery calculations, wiring type and sizes. All plans shall be submitted to the City of Bremerton Department of Community Development.
  - (2) System Design: F ire alarm systems, automatic fire detectors, emergency voice/alarm communication systems and notification devi ces shall be designed, installed and maintained in accordan ce with UFC Sta ndards 10.2 and 10.3; NF PA 70, National Electrical Code; NFPA 72; The National Fire Alarm Code. Installation, maintenance, and testing shall be in accordance with NFPA 72, the National Fire Alarm Code; and any other nationally recognized standards as required by the Bremerton Fire Department.
  - (3) Equipment: All system s components shall be listed in the plans and specifications, shall be compatible with each other, and shall be listed by the Underwriters Laboratory, Factory Mutual, or other nationally recognized testing agency.

- (4) Acceptance Test: Upon completion of the installation or alteration, a satisfactory test of the entire system and its functions shall be made in the persence of a designee of the Fire Chief within two weeks of completion of installation. Prior to the acceptance test, written documentation shall be provided to the fire department certifying that the system has been installed in accordance with the approved plans and specifications.
- (5) Locatio n/Security: The contro 1 unit, remote annunciator panel an d access keys to locked fire alarm equipment shall be installed and maintained in a location approved by the Bremerton Fire Department. Alarm panel access keys and building access keys or m aster keys shall be provided and kept in an on-site wall m ounted entry key safe provided by the building ow ner and shall meet specifications of the Bremerton Fire Department. The Bremerton Fire Department shall specify location and mounting of the key safe.
- (6) Instructions: Written operating instructions for the fire alarm system shall be provided and kept in an on-site wall mounted entry key safe provided by the building owner and shall meet specification s of the Boremerton Fire Department. The Bremierton Fire Marshall's Office shall specify location and mounting of the key safe. All alarmosystems shall be capable of being silenced without having to be reset. Alarmopanels that require a reset code to silence or reset the system shall be programmed with a fire department reset code that is approved by the Fire Marshall's Office.
- (7) Maintenance: Maintenance of the alarm system shall be provided and all required tests and maintenance procedures shall be performed in accordance with the equipment manufacturer's specifications, UFC Standards 10.2 and 10.3; NFPA 72; The National Fire Alarm Code, and other nationally recognized standards as may be required by the Bremerton Fire Department. The fire department shall be notified verbally, and in writing, every time a fire alarm system needs maintenance or is out of service. The written notice shall explain all problems, and any corrections that may be made to system.

# (c) Smoke Detectors in Dwelling Units and Guest Rooms.

(1) Sm oke detectors shall be installed as required by U.B.C. Section 310.9 and U.F.C. Section 1007.2.9.2(a) in all dwelling units and hotel or lodging hou se guest rooms. Detectors may not be interconnected into a fire alarm system.

#### (d) Alarm System Malfunction or Failure.

(1) In the event of malfunction or failure of any fire alarm system, rendering the system inoperative, the Fire Chief, or his representative, may require on-site fire watch personnel be maintained at the owner's expense. The Fire Chief or his representative shall maintain fire watches for a period as determined. Each fire watch shall have access to either a fire department two-way radio or a telephone for immediate communication of any fire or emergency. All personnel assigned for fire watch duties shall first receive approval of the Fire Chief, or his representative, after a satisfactory demonstration of fire knowledge and emergency procedures.

# (e) Existing Buildings.

(1) No exist ing buildings, except those stated in Section (a)2(iii) of this code, shall be made to confor m with the provisions of this code, except where structural deficiencies affecting life or fire safety are involved, and in the opinion of the Fire Chief, such continued use would be hazardous to the safety of the occupants.

## (f) Sprinklered Buildings.

(1) When buildings are completely sprinklered, they shall not be required to have a full automatic detection system other than that required for smoke and combustion products detection. Automatic detection systems shall include the ap proved installation of manual sending stations, audibility and visibility and shall provide for monitoring of sprinkler flow and tamper switches. (Ord. 4534 §4, 1995; Ord. 4424 §1 (in part), 1993).

<u>Permits and Inspections</u>: All fire alarm systems must be reviewed and approved by the Fire Department. Three sets of plans shall be submitted to the City Building Department, which will be forwarded to the Fire Department for approval. The permit fees have been waived. An electrical permit is still required from the Department of Labor and Industries. Standard acceptance tests are required for all new and updated fire alarm systems.

# **Definitions:**

"R-1 Building" is defined as an apartment building, townhouse apartments, motel, hotel, congregate residence or condominium.

"Level-I Building" R-1 building less than 3 floors in height and more than 4 dwelling units.

"Level-II Building" R-1 building 3 or more floors in height and less than 17 dwelling units.

"Level-III Building" R-1 building 3 or more floors in height and 17 or more dwelling units.

## **Contacts:**

Department of Community Development City of Bremerton 345 6<sup>th</sup> Street, Suite 600 Bremerton, WA 98337 360-473-5244 Fax 360-473-5278