Fire Alarm Plan Review Requirements

2018 IBC

Send all permit submittals as PDF documents or email a cloud server or Dropbox file link to planreviewer@cityofmyrtlebeach.com, including a completed permit application and a set of signed, stamped and dated plans by a SC registered engineer. See the list below of the following minimum requirements:

- Label use of all rooms;
- Locations of alarm-initiating and notification appliances; annunciator to be located in vicinity of main entrance; visible alarm notification appliances shall be provided in all public & common areas;
- Power connection;
- Battery calculations;
- Conductor type, sizes and protection of circuits;
- Voltage drop calculations;
- DB level of horn(s); minimum 70 db;
- Location and height of fire alarm boxes;
- If fire alarm system is monitored; if not, a sign shall be installed complying with 2018 IBC Section 907.3.4;
- Fire alarm symbols legend.

Contact:

Colleen Hajnal
Plans Expeditor
(843) 918-1195
chajnal@cityofmyrtlebeach.com
### Project Coordination

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This permit becomes null and void if work or construction which is authorized is not commenced within six months of its issuance, or if work or construction is suspended or abandoned for a period of 6 consecutive months at any time after it is commenced. This permit does not grant any right or privilege to erect any structure or to use any premises herein described for any purpose or in any manner prohibited by the Zoning Ordinance of the City of Myrtle Beach.
Fire Alarm Acceptance Test

1. Tools required on site
   a. Can smoke for the detectors or recommended method for testing the smoke chamber approved by the manufacturer, smoke bombs for the duct detectors, heat gun for heat detectors or any other device necessary for testing initiating devices.
   b. Two-way radios.
   c. Any other tools required for testing of the system.

2. Approved set of plans
   a. Check the locations of all devices, panel(s), and remote annunciator.
   b. Make sure that all zone maps are installed, legible and that the initiation devices are located accordingly to the plans and the FACP.

3. Check the fire alarm control panel (FACP)
   a. Placard 20 square inches minimum on or near the FACP, with the central station name and phone number.
   b. Check the FACP for the electrical panel and breaker number supplying power making sure there is a lock-out on the breaker.
   c. Disconnect each phone line and verify trouble.
   d. Disconnect power supply to verify battery operation, and disconnect battery and verify trouble on the FACP.
   e. Verify spare fireman’s phones.

4. Testing of the fire alarm system
   a. Place the system on “Test”.
   b. Test each smoke and heat detector for proper operation and check the FACP for correct verification of the location of each unit.
   c. Smoke detectors shall be mounted three feet from any air supply diffusers or ceiling fans.
   d. Smoke detectors shall be mounted on the walls 4” minimum to 12” maximum from the ceiling to the top of the detector.
   e. Automatic door closure smoke detectors shall be located along the center line of the door a maximum of 60” from the door at ceiling locations.
   f. Verify HVAC shut down and automatic doors close properly and form a seal.
   g. Verify all tamper switches work properly, maximum of two turns or 1/5th the travel distance of the valve from its’ normal position.
   h. Verify all flow switches work properly and signal alarm between 30 and 60 seconds of water flowing.
   i. Verify all indicating devices working properly.
   j. Audible characteristics, 15dba above ambient noise levels, 120dba maximum, areas having sound levels above 115dba requires visual signaling appliances.
   k. Location of visual devices shall be between 80” minimum to 96” maximum above the finish floor.
   l. The flash rate shall not be over 2 flashes per second, nor less than 1 flash per second.
m. Check for strobe synchronization in the same viewing area. Allow time for the strobe to operate to determine the circuit is in synchronization.
n. Verify the operation of all manual pull stations.
o. Pull station height minimum 3.5 ft and maximum 4.5 ft above finish floor.
p. Pull stations shall be located a maximum of 5 ft from any exit door on each floor in the direct path of travel, also a pull station shall be located adjacent to the main telephone switchboard.
q. Take the system off test. Test the smoke detector in the FACP room timing the signal arrival to Fire Dispatch (three minutes) and verify address and structure name with dispatch.

Fire alarm inspections require a 48 hour notice. During the inspection process if any two (2) of the inspection items listed above fail, the inspection will be terminated and a re-inspection fee will need to be paid before another inspection request is called in.

NOTE: According to the equipment located in the building, additional test may be required.

_I have checked the above procedure and all items on the list are working properly._

Signature ___________________________ Date __________________

Print Name __________________________

Company ___________________________

This form shall be faxed to 843-918-1158 BEFORE date of final inspection.