

Regulations Governing Fire Protection Systems That Will Be Connected to the Town of Wayland Municipal Fire Alarm System



- 1. All owners, architects, contractors, and sub-contractors contemplating work which comes within the scope of these regulations shall familiarize themselves with the requirements set forth and should feel free to consult with the Chief of the fire department.
- 2. As required by Massachusetts General Law Chapter 148, Section 27A, before commencing the work, the owner, contractor, or sub-contractor shall make an application to the fire department, on a prescribed form furnished by the Town, to have the necessary connections made to the municipal fire alarm system.
- 3. Three complete sets of plans that clearly indicate all fire alarm devices, including but not limited to smoke, heat, duct detectors, sprinkler devices, pull stations, audible and visual sounding devices, and CO detectors, shall be provided to the fire department for approval. The fire department will review, approve, and stamp the plans. One set shall remain with the fire department, and two sets will be returned (one for the building department and one for the installer).
- 4. All permit and plan review fees must be paid prior to a permit being issued. All fees must be paid by check payable to the Town of Wayland. (Please call for current fee schedule.)
- 5. All fire alarm panels shall be of a fully addressable type. Each device must have a distinct address, and the address must be clearly labeled on the device. All duct detector indicator and reset switches will be located with the fire alarm control panel unless approved by the Wayland Fire Department. All switches, indicators, and roof top units will be clearly labeled.
- 6. All such fire protection systems shall be inspected and approved by the Chief of the fire department or his authorized representative before connection is made to the wireless fire alarm system. In addition, upon completion of the work the installer shall turn over to the fire department complete instructions, schematic and installation diagrams, and all other data pertaining to the installation, operation, and servicing of the particular system(s).
- 7. All systems, once connected to the municipal fire alarm system, shall be maintained to fire department standards. Any system, which through the lack of

maintenance or for any other cause, results in needless alarms to the fire department or interferes with the proper operation of the municipal fire alarm system may be disconnected from the municipal system by the Chief of the fire department and may not be reconnected until permission is received from the Chief of the fire department.

- 8. Interior alarm systems, heat or smoke actuated fire detection systems, sprinkler water flow alarms, and other similar fire protection and detection systems shall be installed in compliance with the latest revisions of the National Fire Protection Association 72 and the National Electrical Safety Code where applicable.
- 9. Sprinkler systems shall be installed in compliance with the latest revisions of the National Fire Protection Association 13.
- 10. All equipment and components of any fire protection or detection system shall bear an Underwriters Laboratory or Factory Mutual "APPROVED" or "INSPECTED" label.
- 11. The master fire alarm box shall be a sixteen zone Radio Fire Alarm Box manufactured by Sig Com. The local distributor is L.W. Bills, 800-892-0275.
- 12. The Wireless Master Box will be installed in the following manner:
 - a. Following manufacturers' requirements, NFPA 72, NFPA 1221.
 - b. The location of the box shall be approved by the fire department. Boxes shall be located in the same room as the fire alarm panel.
 - c. The fire alarm control panel shall be connected to the radio box with stranded wire. The connection shall be made in such a way that when a zone is activated, only the corresponding zone in the radio box will be activated.
 - d. Radio box zone assignments will be made by the Wayland Fire Department.
 - e. The radio box number shall be assigned by the Wayland Fire Department.
 - f. Radio boxes will be set to test daily at a time assigned by the Wayland Fire Department.
 - g. Radio boxes shall be programmed for a 30 second delay in transmitting a trouble condition.
 - h. Radio boxes shall be programmed with door-open tamper switch active.
 - i. Radio boxes shall be mounted between a height of four (4) and six (6) feet from the finished floor surface. There shall be no obstructions to the box.
- 13. The antenna for radio alarm boxes shall be installed in the following manner:
 - a. Following manufacturers' requirements, NFPA 72, NFPA 1221.

- b. The location of the antenna shall be approved by the fire department.
- c. Any antenna cable run shall meet or exceed RG213.
- d. A rigid aluminum or galvanized steel conduit shall protect the antenna cable continuously to the radio box enclosure. Two 6" loops shall be left inside the junction box.
- e. A service box weather head is required at the antenna end.
- 14. Inspections and final installation of wireless box must be scheduled. At a minimum, the following people need to be onsite for testing of the systems and to obtain final approval and sign off from the Wayland Fire Department.
 - a. Fire alarm installer
 - b. Fire alarm panel programmer
 - c. Sprinkler contractor
 - d. Elevator contractor
 - e. Wayland Fire Department representative
 - f. Optional: building department official, a representative from the wireless box distributor
- 15. The expense of the wireless fire alarm box, including all necessary parts, relays, cabling, etc., shall be the responsibility of the owner of the property to be protected.
- 16. Once the wireless fire alarm box is in service, the following rules apply:
 - a. Anytime there is to be work performed on the auxiliary system, the Wayland Fire Department shall be notified at 508-358-7951 before the work commences.
 - b. Under no circumstances shall anyone other than an authorized authority of the Wayland Fire Department open or in any way tamper with the inner workings of the master fire alarm box.
 - c. Although it cannot be required by this department, the Wayland Fire Department strongly recommends that a complete and regular testing program be established for any auxiliary fire protection or detection systems that are installed under our jurisdiction. Further information on this subject may be obtained by contacting the Chief of the fire department.

Contractor Check List

Before calling for a radio box check out (connection), please complete the following items, check them off, and return signed sheet to Wayland Fire Department.

The radio box must be securely mounted to wall.
The antenna must be mounted and cable run into radio box.
A/C power is run into, and connected to the radio box (remove radio box fuses).
Zone wires are run from fire panel must be connected both at the radio box and inside the fire panel (dry closures/no voltage).
All accessories supplied with the radio box must be available (battery, tilt detector pendulum, antenna pig-tail, antenna end & coupling, antenna bullet and fuses).
Supplied programming sheet must be filled out and approved by the fire department.
e final check of the radio box will not be scheduled until this form has been filled out, signed, d returned.

Signing this form authorizes The Wayland Fire Department to charge you for the time incurred at our normal rates, if all checked list items are not completed at the time of the check out.

Signature

Print Name

Company

Date

If Wayland Fire Department is requested to perform any of the above, it will be at an hourly rate of \$85.00 per hour with a three-hour minimum.

Wayland Fire Department 38 Cochituate Road Wayland, MA 01778

Radio Master Box Inspection

Date:	_	Installe	r Info:		
System:		Compar	ny Nam	e:	
Box #:	_	Contact	Person	:	
Phone #:		Phone #:			
Location:					
Antenna Location:		Forward Power:			
PL 259 Inspection:		Reflected Power:			
SWR:		Signal Strength @ Dispatch			
OHM:		No. of Zones:			
AC Fuse DC Fuse	Tilt Int	Power Led		Silence	
AC Fail Low Batt				Batt Chrg	
Zones in Use					
Zone # Alarm Clr	Zone# Alarm	Clr	Zone#	Alarm Clr	
1	7		13		
2			14		
3			15		
4			16		
5					
6	12				
Parameters:					
Test Time:	Test Inter	rval:		Round delay:	
AC Fail Delay hrs					
Check Vision 21 receiver printo					
Fire Dept Rep:			_	Date:	
Installers Rep:			-	Date:	
Comments/Corrections:					

Wayland Fire Radio Box Programming Information Sheet

Box

Building Name: Box Address: Installing Company: Contact Person: On Site Contact: _____

Box No			Zone Location / Description : The box number is transmitted with test, trouble, hook & function button messages.
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
Notes:		•	Warning: Id Codes are computed by adding the box number to the zone number. Confirm availability of codes with Wayland Fire Alarm Specialist.

Test Interval 24 hrs Round Delay: _____ (1-30 sec.) Test Time:_

Fire Department Approvals:

Zone Information:______ Box Location:_____

Antenna Location :	Final
Test/Acceptance	