



FIRE ALARM SYSTEM PLAN SUBMITTAL CHECKLIST

All fire alarm system plan submittals must include this Fire Alarm System Plan Submittal Checklist.

PLAN APPROVAL - No work shall be performed until plans are reviewed and approved.

By providing all the information requested in this checklist and any other requested information pertinent to your project, you are assuring the quickest possible turnaround time for plan review. It is the responsibility of the designer/installer of record to assure all applicable code requirements are satisfied. The current adopted edition (2007) of the International Fire Code and the International Building Code, with local and state amendments, together with the 2007 edition of NFPA 72 – The National Fire Alarm Code shall be the primary, but not all inclusive, resource documents for code requirements, design and installation standards. Additional requirements applicable to a specific jurisdiction may also apply.

SUBMITTAL REQUIREMENTS

Permits are required to install or modify a fire alarm or detection systems and / or related equipment. Applications for such permits shall include the following:

Fees and Permit Application Form

- The appropriate fee and a completed application form provided by the jurisdiction is required.

Vicinity Map

- A vicinity map showing the site address and location, nearest cross street and nearby buildings – for multi-building properties or suites in a building.

Contractors License

- Proof of current 01 or 06 license issued by the Washington State Department of Labor and Industry.

Original Design and Installation Documents (Unless otherwise noted, provide three sets of each)

- Installation drawings:
 - Minimum size of 24" x 36"
 - Drawn to an indicated scale (1/8" = 1' - 0" minimum)
 - Containing the job title, site address and designer's name, address, phone and fax numbers.
 - Floor plans, clearly indicating the use and / or function of all rooms and areas; the location of all alarm-initiating, control, notification, annunciation or trouble signaling devices or equipment, device addresses; ceiling height, type of construction (Example: beams, joists, ceiling slope, drop ceiling, refer to NFPA 72 section 3.3.22 and 3.3.24) and elevations as needed to clearly indicate construction features; power connections – high and low voltage if applicable, and a wiring diagram including point-to-point connections for all equipment (No reflected ceiling, HVAC, or lighting on fire alarm plans.)
 - A legend clearly identifying all device symbols (NFPA 170 symbols are preferred.)
 - Conductor types and sizes.
 - Circuit class and style
- Cut sheets or other necessary information for all devices and equipment:
 - Device manufacturer, model number, operational requirements and limitations, listing information (per UL 864) shall be clearly identifiable or hi-lighted.
 - Listed compatibility with existing equipment (if applicable) shall be indicated.



**FIRE ALARM SYSTEM
PLAN SUBMITTAL CHECKLIST**

- System Calculations
 - o Battery calculations including a minimum 1.2 derating factor. Employee work areas with audible alarm coverage shall have a 20% extra capacity for ADA.
 - o Voltage drop calculations.
- A single-line riser diagram of all devices, circuits, power connections and interfaces.
- A project narrative to include design assumptions for detection and notification, current and projected occupancy type, scope of work, type of panel, and number of devices.
- The interface of all fire safety control functions.
- A Sequence of Operation / Alarm Matrix.

Faxes are not accepted for original submittals.

Additional Submittal Requirements

- Name and contact information for the listed supervising or remote station.
- If system layout is a performance-based design, include design parameters and values per NFPA 72, 2007, Appendix B.
- Plan or drawing revisions shall be submitted with changes clouded. Other changes or corrections shall be clearly identified.
- Zone maps may be required at the discretion of the AHJ

SITE REQUIREMENTS

- The approved set of plans, including comments and conditions of approval issued by the AHJ shall be available on-site while work is being accomplished.
- The permit shall be posted and other permitting information shall be retained on site.

By checking the above boxes you are indicating that all required information is present and that the submittal is “counter complete” and ready for review and subsequent approval. Submittals requiring additional information shall be placed “on hold” until required information is submitted. If upon review corrections to the design are necessary part or all of the submittal package may be returned to the applicant for correction and re-submittal prior to approval or permit issuance. **WORK REQUIRING A PERMIT IS NOT AUTHORIZED UNTIL PLANS ARE REVIEWED AND APPROVED AND NECESSARY PERMITS ARE ISSUED.**

Signature: _____

Date: _____

Print Name: _____

Title: _____

Staff Name: _____

Date: _____



FIRE ALARM SYSTEM PLAN SUBMITTAL CHECKLIST

AS BUILTS AND INSTALLATION MODIFICATIONS

Modification to approved plans or calculations shall be reflected in an “As Built” drawing. Modifications that result in a variance of 10% to any approved calculation shall be submitted to the AHJ as a revision requiring approval prior to any system acceptance testing or permit approval. “As built” point map drawings and calculations shall be provided to the AHJ inspector prior to acceptance testing.

INSPECTION AND APPROVAL REQUIREMENTS

ACCEPTANCE TESTING

- A functionality and acceptance test shall be witnessed by the AHJ. The installer shall provide all necessary test equipment including volt / ohm and decibel meters.
 - No partial inspections or acceptance testing will be conducted prior to the completion of the installation without additional inspection fees being paid.
 - Detection devices shall either be protected or shall not be installed until all trade work has been completed. (Example: painting, clean-up, carpet cleaning, etc.).
 - No testing will occur until system monitoring is operational and all devices and communicators have been field tested, proven to be operational and are functioning correctly.
 - The required Labor and Industry electrical inspection shall be completed with the inspection sticker or permit card signed prior to acceptance testing.
 - A “Record of Completion” shall be delivered to the AHJ prior to inspection.
 - All initiating or input devices shall have legible addressing labels affixed to device
- Contact the appropriate AHJ to request an inspection at least two work days prior to the desired inspection date.

Kitsap County	360-337-4699	City of Port Orchard	360-871-2411
Bainbridge Island	206-842-7686	City of Poulsbo	360-779-3997
City of Bremerton	360-473-5394		
 - Final system and permit approval is subject to Field Inspection.
 - Re-inspection fees may be assessed where work for which an inspection has been requested is not complete or where such work fails to meet operational expectations. Assessment of reinspection fees shall be at the discretion of the individual AHJ per code or policy and such fees shall be paid prior to subsequent inspections being performed or approvals granted.

FIRE ALARM SYSTEM OPERATIONAL MATRIX

	FACP\ANNUNCIATOR ALARM	FACP\ANNUNCIATOR TROUBLE	FACP\ANNUNCIATOR SUPERVISORY	DOOR/FSD HOLD RELEASE	ACTIVATE ALARM TO CENTRAL STATION	ACTIVATE TROUBLE TO CENTRAL STATION	ACTIVATE SUPERVISORY TO CENTRAL STATION	PRIMARY ELEVATOR RECALL	SECONDARY ELEVATOR RECALL	SHUNT TRIP ELEVATOR EQUIPMENT	HORN / STROBE ACTIVATION*
SMOKE DETECTOR	X			X	X						X
MANUAL PULL STATION	X			X	X						X
WATER FLOW	X			X	X						X
TAMPER SWITCH			X			X					
ELEVATOR LOBBY FLR1,2,4-6 SMOKE DET								X			X
HEAT DETECTOR	X			X	X						X
ELEVATOR LOBBY FLR 3 SMOKE DET	X				X				X		X
HEAT DETECTOR IN ELEVATOR MACHINE ROOM	X									X	X
SMOKE DETECTOR IN ELEVATOR MACHINE ROOM	X			X	X			X			X
SYSTEM TROUBLE		X				X					

*HORNS AND STROBES ONLY ACTIVATE IN ZONE OF ALARM

ZONE 1 = BAY 1 & 2, FLOOR 1 - 6

ZONE 2 = BAY 3, 4 & 5, FLOOR 1 - 6

ZONE 3 = BAY 7 & 8, FLOOR 1 - 6

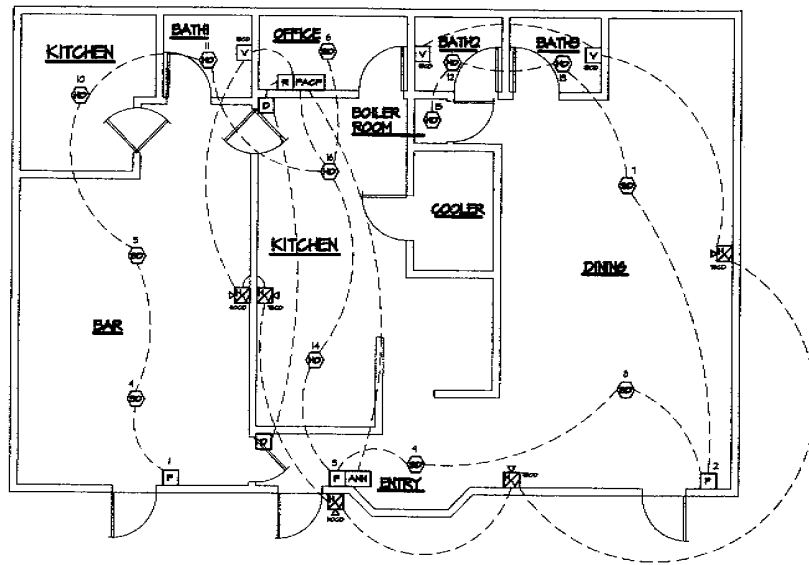
SEQUENCE OF OPERATIONS

ACTIVATION OF WATER FLOW SWITCH	ACTIVATION OF SPRINKLER TAMPER SWITCH	ACTIVATION OF DUCT SMOKE DETECTOR	ACTIVATION OF MANUAL PULL STATION	TROUBLE CONDITION AT PANEL	
X			X		ACTIVATES NOTIFICATION APPLIANCES
X	X	X	X	X	TRANSMIT SIGNAL TO APPROVED CENTRAL STATION ALARM MONITORING SERVICE
X		X	X		RTU SHUTDOWN

NOTES:

CENTRAL STATION TO RECEIVE SEPARATE & DISTINCT SIGNALS.

- A) FIRE ALARM
- B) SUPERMSORY ALARM
- C) TROUBLE ALARM



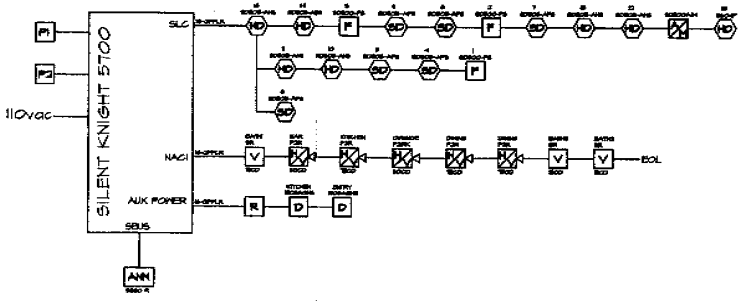
MAIN FLOOR PLAN
1/4" = 1'-0"

CEILING HEIGHT: 9' DROPPED CEILING

- GENERAL NOTES:**
1. ALL WIRE SHALL BE FPLR.
 2. NOTIFICATION APPLIANCE CIRCUITS SHALL BE AT LEAST 16 GAUGE WIRE.
 3. NOTIFICATION APPLIANCE CIRCUITS SHALL BE AT LEAST 18 GAUGE WIRE.
 4. MANUAL PULL STATIONS SHALL BE MOUNTED AT LEAST 48 INCHES ABOVE FINISHED FLOOR.
 5. ALL WIRING SHALL BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE.
 6. NOTIFICATION APPLIANCES SHALL BE MOUNTED AT A MINIMUM OF 50" ABOVE FINISHED FLOOR.

LEGEND

- | | | | |
|--|-----------------------------|--|----------------------------------|
| | SMOKE DETECTOR | | ADDRESSABLE INPUT MODULE |
| | HEAT DETECTOR | | DUCT DETECTOR |
| | BELL | | DOOR CONTROLLER |
| | STROBE | | MINI HORN |
| | PULL STATION | | WATER FLOW SWITCH |
| | HORN STROBE | | TAMPER SWITCH |
| | FIRE ALARM CONTROL PANEL | | PHONE LINE 1 |
| | ANNUNCIATOR | | PHONE LINE 2 |
| | SPRINKLER RISER | | POST INDICATOR VALVE |
| | CEILING MOUNTED HORN STROBE | | DUCT DETECTOR REMOTE TEST SWITCH |
| | | | RELAY |



RISER DIAGRAM

MAY 2007
 FIRE ALARM
 2007-180

REVISIONS

SPIROS PIZZA
 OWNER, SPC, INC.
 1640 JACKSON AVE. PORT ORCHARD, MA. 01956

SHEET
 FAI