

## WESTMINSTER FIRE DEPARTMENT FIRE ALARM SYSTEM PLAN REVIEW AND ACCEPTANCE REQUIREMENTS CHECKLIST



NOTE: All fire alarm system plan submittals must include this Fire Alarm System Plan Review Requirements Checklist. By completing this checklist and including the necessary information requested, you are assuring the quickest possible turnaround time for your plan review. It is the responsibility of the designer/installer of record to assure that all applicable code requirements are adhered to. The currently adopted editions (as amended) of the International Fire Code (IFC) 2015, International Building Code (IBC) 2015 and the associated National Fire Protection Association Standards (NFPA 72, 2013 ed.) shall be the primary, but not all inclusive, resource documents. If you have any questions please call the Fire Prevention Bureau at (303) 658-4544.

The installation, addition, renovation, and maintenance of any fire alarm system shall comply with the following:

#### PLAN APPROVAL

- □ No installation work shall be performed until plans are reviewed and approved.
- Expect a two- to four-week turn around for plan review per submittal.
- A stamped set of plans and cut sheets approved by the Fire Department shall be available on-site at all times.

All fire alarm plan submittals must contain the following at the time of initial submittal. Submittals lacking this information may result in a delay of the review and approval process.

### **CONTRACTORS LICENSE**

 Proof of Contractors License with the City of Westminster to perform work within City limits will be required at time of permitting. Contact the Building Department at (303) 658-2076 for assistance.

#### FIRE ALARM DRAWINGS

- □ Submit fire alarm drawings online to the Fire Prevention Bureau. Contact (303) 658-4511 for assistance.
- Drawings must be stamped by a minimum level NICET III designer.
- Drawings need to clear and understandable. Drawings must be of a fire alarm design only.
- NO combination drawings using reflected ceiling plans, mechanical, etc. will be accepted.
- □ Drawings shall be scaled: minimum 1/8 inch = 1 foot scale.
- Drawings shall include line and riser diagrams for all devices, notification circuits, auxiliary circuits, initiating circuits, circuit designation and central station connect.
- All symbols utilized shall be indicated in a complete legend positioned on the drawings (NFPA 170 symbols are preferred). Only use symbols pertinent to the submitted project.
- Ceiling heights must be identified on the drawings.
- □ Ceiling construction (e.g. flat, sloped, smooth, joist/beam, etc.) must be identified on drawings.



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## SPECIFICATION (CUT) SHEETS

- □ ALL PERTINENT INFORMATION SHALL BE HIGHLIGHTED ON (CUT) SHEETS (Especially Current Draw).
- □ FACP (Type, Listing, Current Draw).
- Batteries (Type, Listing, Current Draw).
- □ Smoke Detector (Type, Configuration, Spacing, Current Draw).
- Heat Detector (Type, Configuration, Spacing, RTI, or Fixed Temperature, Current Draw).
- □ Shunt Trip Heat Detector (Type, Rating, RTI, or Fixed Temperature, Current Draw for elevators).
- Manual Pull Stations (Type, Configuration, Current Draw).
- Audible Appliances (Type, Rating, Power Taps).
- Alarm Temporal pattern shall be keyed to one half to one second "on" and one second "off" for three cycles. Alarm signals shall be repeated for the duration that the fire alarm is activated (Temporal 3).
- Usual Appliances (Type, Coverage, Current Draw).
- □ Protective Covers (Type, Attenuation).
- Water flow Device (Type, Configuration).
- Supervisory Device (Type, Configuration, Current Draw).
- □ Synchronization Module (Type, Current Draw).
- □ Sequence of Operation in input/output matrix form (Only include functions pertinent to the submitted project).
- Class and Style of Initiating Device Circuits.
- Class and Style of Signaling Line Circuits.
- Class and Style of Notification Appliance Circuits.

### **CALCULATIONS**

- Voltage drop calculations (Lump Sum Formula preferred).
- Battery calculations.
- Wire size, type, and resistance value.

#### ADDITIONAL SUBMITTAL INFORMATION REQUIRED

- U.L. Listed Supervising Station name or Remote Station.
- □ Graphic Map with initiating devices, KNOX box and utilities shut off locations (water, gas & electric) locations.
- Measured or Estimated Ambient Sound Levels used.
  - Alarm signal devices shall produce a sound that exceeds the Average Ambient Sound Level found in TABLE A.18.4.3 in the National Fire Alarm and Signaling Code (NFPA Standard 72, 2013 edition) in the room by 15 decibels minimum, or 5 decibels above maximum sound lasting 60 seconds or greater. The fire alarm signal shall not exceed 120 decibels for any occupied area.
- Design Parameters and Values if Appendix B Calculations were used.
- □ All deviation(s) from the AHJ's adopted Code(s), Standard(s), and/or Amendment(s) requested by the Building Owner shall be submitted in writing and must include:
  - > The current requirement.



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- > The proposed change.
- > Written technical documentation justifying the proposed change.

## REQUIREMENTS PRIOR TO FINAL INSPECTION

- The Westminster Fire Department requires that the installing contractor shall furnish a Written Statement stating that the system has been installed in accordance with approved plans and tested in accordance with the manufacturer's published instructions and the appropriate NFPA requirements.
- The Westminster Fire Department requires that the installing contractor shall furnish the appropriate Record of Completion form to be prepared and submitted prior to final inspections. The Record of Completion documentation shall be permitted to be part of the Written Statement required above. The contractor can complete the Fire Alarm System Record of Completion form that can be found on the City of Westminster website at: www.cityofwestminster.us/PublicSafety/FireDepartment/Permits.
- □ Graphic Map and Firefighter Instructions framed and permanently mounted in an approved location.
- Prior to requesting a final inspection, submit "as built" plans (if any changes occurred from the original approved plans) to the Fire Department.
- □ No acceptance testing will be conducted prior to the completion of construction.
- □ Smoke detectors shall not be installed until final construction, painting, clean-up, carpet cleaning, etc. have been completed.
- □ No testing will occur until all communicators are operational and being monitored.
- □ Final acceptance of any installation is subject to field inspection by the fire department.
- Re-inspection fees may be charged for re-inspections needed due to incomplete systems and/or failure to follow the above rules.

#### CITY OF WESTMINSTER AMENDMENTS TO THE 2015 IFC

Fire Alarm and Detection Systems: Section 907 of the International Fire Code is amended to add Section 907.6.7 to read as follows:

□ 907.6.7 Extent of coverage. The Fire Code Official shall approve the extent of zone coverage for fire alarm systems in all buildings and structures.