

2009 IFC Section 907.1.2(as amended) Fire alarm shop drawings. Shop drawings for fire alarm systems shall be submitted for review and approval prior to system installation. Where the installation changes from the approved shop drawings, corrected shop drawings showing the system as actually installed shall be submitted for review and approval prior to inspection. Shop drawings shall include the following as required by the *fire code official*:

1. Project name, street address and owner's name.
2. Contractor name, address, phone number, license numbers, license classification, and license limit.
3. Wet/electronic signature of licensee (contractor's Master or Qualified Employee).
4. Wet/electronic signature of the NICET designer or Nevada Registered Fire Protection Engineer who prepared the plan, drawing and calculations. For plans prepared by a NICET designer, the designer's printed name and certificate number shall follow the signature.
5. Occupancy classification. For all occupancies, state the occupant load.
6. Fire alarm circuit classification (power-limited or non-power-limited).
7. Class/style designation of all initiating device circuit (IDC), signaling line circuits (SLC), and notification appliance circuits (NAC).
8. Conductor type and size.
9. Sequence of operation input/output matrix as required by NFPA 72.
10. Symbol legend with equipment description (manufacturer's name and model number) and mounting description (surface, semi-flush, flush, and exterior).
11. When required by the *fire code official* symbols used on the shop drawings shall follow NFPA 170, 2006 edition.
12. Site plan.
13. Floor plan drawn to an indicated scale (1/8" minimum) on sheets of a uniform size showing:
 - a. Point of compass (north arrow).
 - b. Walls, doors, windows, openings, stairs, elevators, passageways, high piled storage racks, etc., as applicable to depict the facility.
 - c. Room use identification labels.
 - d. Alarm initiating device, notification appliance, and auxiliary controlled or monitored equipment and systems, control and annunciation equipment location (s).
 - e. Conductor/conduit routing and size.
 - f. Location of end-of-line resistors.
 - g. Zone identification (conventional system).
 - h. Device addresses (addressable systems).
 - i. Notification appliance numbering by circuit and device corresponding to the riser and/or one line diagrams.
 - j. Power panels and circuit connections.
 - k. Key plan.
 - l. Ceiling heights, and construction (i.e., beam, joist, soffit, or other projection extending below the ceiling when a ceiling mounted device and/or appliance is used).
14. Mounting height detail for wall mounted device and/or appliance.
15. Riser diagram including the following information:
 - a. General arrangement of the system, in building cross-section.
 - b. Wall/shaft/stairwell and/or cable ratings when survivability or class A requirements apply.
 - c. Type and number of circuits in each riser.
 - d. Type and number of fire alarm system components/devices on each circuit, on each floor or level.
16. *Fire code official* standard shop drawing notes.
17. Standardized calculations (shown on the plans unless otherwise approved):
 - a. Battery (all panels).
 - b. Load (all notification appliance and auxiliary circuits).
 - c. Voltage drop (all notification appliance circuits, including remote annunciators and auxiliary appliances).
18. Product data submittal including a cover index sheet listing products used by make and model number, manufacturer data sheets and listing information for all equipment, devices, materials, wire and cable.
19. Design number and detail of penetration fire stop system when required.
20. Any additional information determined necessary by the *fire code official*.