


CITY AND COUNTY OF DENVER	POLICY	DENVER FIRE DEPARTMENT
Subject: Fire Sprinkler and Fire Alarm Walk-Through Permits		
Reference: 2016 Denver Fire Code – Appendix N		
Approved:		
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Number: IFC	Effective Date: 4/10/2017	Page 1 of 3

This policy is meant to provide basic information for the most common conditions and situations. In any given occupancy, many other Fire Code requirements may be enforced.

N103.2 Fire Department sprinkler system "walk-through" procedures. Review of the following permit applications shall be provided for the modification of existing wet fire sprinkler systems only. The maximum number of permits reviewed or issued for any single applicant shall be limited to two (2) per day. Applicants shall sign-in at the permit center and await notification for processing. Hours for application are as posted at the permit counter (City holidays excepted). Where shop drawings are required, they shall be stamped and signed by a Colorado licensed professional engineer responsible for the design and submittals shall be in compliance with the relevant codes adopted by the City and County of Denver. Sprinkler permit shall be only issued after the construction permit has been released.

Exception: Relocation or adds of 20 sprinklers to an existing light hazard system shall be allowed to be stamped and signed by minimum of NICET III.

N103.2.1 Project requirements for Fire Department sprinkler walk-through permits. The walk-through project scope is limited to; relocating, adding and plugging sprinklers in accordance with the following:

1. Tenant finish work on an existing sprinkler system involving both sprinkler relocations and additions in a light hazard occupancy for up to 75 sprinklers.
2. Tenant finish work on an existing sprinkler system involving both sprinkler relocations and additions in Ordinary Group 1 for up to 30 sprinklers or Group 2 Hazards for up to 20 sprinklers in other than Group H occupancies and high-piled storage locations as defined in the Denver Fire Code.
3. Tenant finish in warehouses where tenant finish is in accordance with Item 1 and 2 above.
4. For tenant work on all light hazard existing sprinkler systems involving sprinkler relocations and additions, the contractor shall ensure that not more than two (2) sprinklers are fed from any 1" outlet in the new construction area. A maximum of 75 added sprinklers are permitted per zone or floor level. Where the design requires more than two (2) sprinklers to be fed from a 1" outlet, hydraulic calculations shall be provided to ensure the friction loss permits adequate flow for the required design area

demand. Full floor layout showing all sprinkler locations and pipe sizes shall be submitted.

N103.2.2 Plan submittal - Required information for sprinkler permit walk-through.

Two (2) complete sets of shop drawings showing all floors that are affected including:

1. Name of owner and occupant
2. Location, including street address
3. Point of compass
4. Full height cross-section, or schematic diagram, if required for clarity, including ceiling construction and method of protection for nonmetallic piping
5. Location of partitions
6. Location of firewalls
7. Building construction type and occupancy classification
8. Location and size of concealed spaces, closets, attics, and bathrooms
9. Sources of water supply with pressure or elevation
10. Make, type, temperature, coverage characteristics, nominal orifice size and K-factor of sprinkler heads. Method of protection for nonmetallic piping.
11. Location of high-temperature sprinklers
12. Total area protected by each system on each floor
13. Pipe type and schedule of wall thickness
14. Nominal pipe size and cutting lengths of pipe (or center-to-center dimensions)
15. Location and size of riser nipples
16. Type of fittings and joints and location of all welds and bends. The contractor shall specify on drawings any sections to be shop welded and the type of fittings or formations to be used
17. Type and locations of hangers, sleeves, braces and methods of securing sprinklers when applicable
18. Layout identifying sizes and locations of existing piping serving the affected floor or area
19. Pipe schedule system justification where such systems are permitted by NFPA 13, Chapter 23

N103.4 Fire Department fire alarm system "walk-through" procedures. Review of the following permit applications shall be provided for the modification of existing fire alarm systems only. The maximum number of permits reviewed or issued for any single applicant shall be limited to two (2) per day. Applicants shall sign-in at the permit center and await notification for processing. Hours for application are as posted at the permit counter (City holidays excepted). Submittals shall be in compliance with the relevant codes adopted by the City and County of Denver. Fire Alarm permit shall be only issued after the construction permit has been released. Fire alarm permit applications may be eligible for walk-through review in accordance with the following:

Exception: Relocation or adds 6 appliances and/or 4 initiating devices on existing fire alarm system shall be allowed to be stamped and signed by minimum of NICET III.

- a. Circumstances under which permit applications may be submitted:
1. New equipment, devices and/or appliances connected to existing fire alarm systems in other than Group H occupancies. Installation shall be limited to a maximum of twenty-four (24) new or relocated notification appliances on a single floor and the addition of twelve (12) new or relocated initiating devices on an existing circuit or addition one (1) power supply. Initiating devices connected to access control systems or installed in battery rooms are not eligible for walk-through review.
 2. Transferring existing monitoring companies
 3. Removal and reinstallation of a device in the same location
 4. Installing a new replacement dialer or communicator, or reprogramming same to new central station.
 5. Sprinkler Monitoring. New fire sprinkler monitoring systems. System to be installed in accordance with IFC 903.4.1
 6. Emergency fire alarm panel replacement for an existing system. An emergency panel replacement permit shall be acquired within one (1) normal business day of the commencement of work. The proposed panel shall be compatible with the fire alarm system. A complete application in accordance with Section 907.1.2 shall be submitted within ten (10) normal business days of the commencement of work. The emergency replacement panel is subsequently subject to the requirements for a planned replacement panel.

Exception: Construction permit shall not be required for existing approved fire alarm systems

N103.4.1 Plan submittal - Required Information for fire alarm permit walk-through.

Two (2) complete sets of plans shall be submitted that include the following (as applicable):

1. Completed permit application
2. Building code occupancy classification
3. Manufacturers' specification sheets and equipment listing sheets for new equipment and devices
4. Installation codes and standards used
5. Type of system and reason system is provided (required, non-required)
6. Sequence of operation
7. Identification of duct detectors in air-handling units exceeding 2,000 cfm (0.94cu m/s) (not required in VAV boxes less than 2000cfm (0.94cu m/s) each, but aggregate air flow exceeding 2000cfm (.94cu m/s) boxes served by central fan system)
8. Voltage drop calculations and battery calculations
9. Description of annunciation assignments (complete zone schedule)
10. Shop drawings, drawn to scale, including a drawing for each building level involved, with a north arrow for compass orientation and depicting all control and

annunciation panels and peripheral devices. Shop drawings shall bear the seal and signature of a professional engineer licensed by the State of Colorado.

11. Plan for upgrading existing annunciator panel, if applicable
12. One-line diagram showing scope of work and identifying new devices
13. Site address, identification of each room's usage, and areas having automatic detection
14. Provide building details (i.e., attics, ceiling cavities, etc.)
15. Mounting heights for manual fire alarm boxes and strobes
16. Primary power supply connection details and symbol list.

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