

DEPARTMENT OF PUBLIC SAFETY

Division of Fire Prevention and Control

8 CCR 1507-11

FIRE SUPPRESSION PROGRAM

[Editor's Notes follow the text of the rules at the end of this CCR Document.]

SECTION 1 INTRODUCTION AND BACKGROUND INFORMATION

The Colorado Fire Suppression System Program began on January 1, 1991. It was created by Senate Bill 90 4, which was signed into law on May 18, 1990. The purpose of the Colorado Fire Suppression Program is to ensure that life safety systems, installed in commercial and residential occupancies, are installed and maintained properly, according to nationally recognized standards. 24 33.5 1204.5, C.R.S. establishes the authority to promulgate rules and regulations to administer the fire suppression program and to establish fees and charges necessary to defray the anticipated costs of the program.

SECTION 2 DEFINITIONS

The definitions provided in 24 33.5 1202, C.R.S., shall apply to these rules and regulations. The following additional definitions shall also apply:

- 2.1 CERTIFICATE OF REGISTRATION (OR REGISTRATION): means the document issued to a contractor under these Rules and Regulations authorizing a contractor to conduct business in this state.
- 2.2 COMPANY: means a corporation, partnership, firm or association, two or more persons having a joint or common interest, or any other legal or commercial entity.
- 2.3 CEU: - Means continuing education units. Each 10 hours of related professional development activities equals one CEU.
- 2.4 INDIVIDUAL (OR PERSON): means a person, including an owner, manager, officer, employee, or individual.
- 2.5 INSTALLATION: means the initial placement of equipment or the extension, modification, or alteration of equipment after the initial placement.
- 2.6 LOCAL AUTHORITY HAVING JURISDICTION: means the fire chief, fire marshal or other designated official of a county, municipality, or special district that has fire suppression systems enforcement responsibilities and employs or otherwise provides a certified fire suppression systems inspector.
- 2.7 MAINTENANCE: means to sustain in a condition of repair that will allow performance as originally designed or intended.
- 2.8 MULTIPURPOSE SYSTEM: Means a residential fire suppression system that utilizes domestic water distribution piping to supply domestic plumbing fixtures and fire sprinklers in accordance with NFPA 13D. A multipurpose system may also be referred to as a combination system or network system.

- 2.9 NICET: means the National Institute for Certification in Engineering Technologies.
- 2.10 NFPA: means the National Fire Protection Association.
- 2.11 PERMIT: Means a construction permit for a fire protection system issued by the Division of Fire Safety once construction plans or shop drawings have been approved or approved with corrections. A permit issued by the Division of Fire Safety allows a certified fire suppression contractor to install or modify fire suppression systems, appurtenances, and equipment as shown on the approved drawings.
- 2.12 PEX Pipe: Means cross-linked polyethylene pipe.
- 2.13 PROFESSIONAL ENGINEER: - Licensed as an engineer and working within competence, training and/or education pertinent to the fire sprinkler industry.
- 2.14 RESPONSIBLE MANAGING EMPLOYEE (RME): - is an individual or person employed full time by a fire suppression contractor who is currently a professional engineer or certified by the National Institute for Certification in Engineering Technologies (NICET) at a level III or level IV in fire protection engineering technologies, automatic sprinkler layout, or another nationally recognized organization approved by the Division of Fire Safety. A RME may only act as such for one fire suppression contractor.
- 2.15 SERVICE (OR REPAIR): means to repair in order to return the system to proper operational condition.

SECTION 3 REGISTRATION OF FIRE SUPPRESSION SYSTEM CONTRACTORS

3.1 Registration Required

- 3.1.1 Any individual or company who physically works on or install any part of a fire protection system, including underground supply lines from public water lines to system risers and backflow preventers, must be registered.
- 3.1.2 Any company that employs individuals who physically work on or install any part of a fire protection system, including underground supply lines from public water lines to system risers and backflow preventers, must be registered.
- 3.1.3 Exemptions:
 - A. Underground supply lines installed by public utilities.
 - B. Building owners, conducting maintenance on their fire protection systems under the provisions of NFPA 25, and filing reports with the local fire department having certified fire suppression system inspectors or the Colorado Division of Fire Safety. This exception does not apply to work conducted on system components that would require licensing or certification under any state or federal laws or regulations.
 - C. An individual that installs a system in his or her single family residence (owner occupied) that is designed by a registered contractor and installed in accordance with NFPA 13D standards, and meets all local requirements.
 - D. Individuals or companies installing pre-engineered range hoods and duct extinguishing systems.

- 3.1.4 Any company or individual conducting maintenance, service or testing of backflow prevention devices installed on fire sprinkler systems shall be a Certified Cross-Connection Control Technician and must possess a valid certification from the American Society of Sanitary Engineering (ASSE), the American Backflow Prevention Association (ABPA), or the Association of Boards of Certification (ABC), in conformance with requirements set forth by the Colorado Primary Drinking Water Regulations. The registration for individuals or companies who conduct maintenance, service or testing of backflow prevention devices shall be known as "FIRE SUPPRESSION SYSTEM CONTRACTOR – BACKFLOW."
- 3.1.5 The registration for individuals or companies who install underground supply lines from public water lines to system risers shall be known as "FIRE SUPPRESSION SYSTEM CONTRACTOR – UNDERGROUND."
- 3.1.6 Any individual or company registered as "FIRE SUPPRESSION SYSTEM CONTRACTOR UNDERGROUND" may not install any other component of a fire suppression system.
- 3.1.7 Any individual or company registered as "FIRE SUPPRESSION SYSTEM CONTRACTOR BACKFLOW" may not install any other component of a fire suppression system.
- 3.1.8 Any individual or company registered as "FIRE SUPPRESSION SYSTEM CONTRACTOR - MULTIPURPOSE" may only install multipurpose residential fire suppression systems complying with NFPA 13D requirements and for which they are authorized or have received specific system manufacturer's or PEX tubing manufacturer's training.

3.2 Application Requirements

In order to register, each contractor doing business in Colorado must understand, agree and attest to the following:

- 3.2.1 That the applicant has general liability insurance that includes products and completed operations coverage related to the installation of fire sprinkler systems, fire suppression systems, or life safety systems.
- 3.2.2 That the applicant is a principal of the company as defined in Colorado Revised Statutes 24 33.5 1202 (8), and recorded with the Colorado Secretary of State's Office.
- 3.2.3 That all information included on the application is correct.
- 3.2.4 That the contractor will notify the Division of Fire Safety of any changes that occur in the information provided, including, but not limited to: a change in principal agent of the contractor, or a change in address, telephone number or insurance coverage.
- 3.2.5 That the contractor will comply with all applicable codes and standards adopted by the Administrator and all codes, ordinances and resolutions adopted by municipalities, counties and fire protection districts.
- 3.2.6 That the contractor will comply with Colorado Revised Statutes governing fire suppression systems, and all rules adopted by the Administrator.

- 3.2.7 That the contractor understands that the "Application for Registration" is an official document legally binding the contractor to the provisions of Colorado Revised Statutes 433.5 1202 through 1208, et seq. and all rules adopted by the Administrator.
- 3.2.8 That the contractor shall not perform any installation or maintenance work on a fire suppression system in Colorado until such time their registration has been formally issued by the Administrator.
- 3.3 Procedures for Registration
 - 3.3.1 A fire suppression contractor can pick up an "Application for Registration", or request that one be mailed, or the contractor can obtain an application on the Division of Fire Safety's website. Registration applications are available from the Colorado Division of Fire Safety, 9195 East Mineral Avenue, Suite 234, Centennial, CO 80112, Telephone 720-852-6735.
 - 3.3.2 The contractor must complete all parts of the application and sign it. The original application, along with a check or money order, or VISA/Mastercard information, in payment of the annual registration fee, must be returned to the Division of Fire Safety.
 - 3.3.3 The contractor must submit documentation of general liability insurance that includes products and completed operations coverage related to the installation of fire sprinkler systems, fire suppression systems or life safety systems. The documentation submitted shall include inclusion and exclusions of the coverage.
 - 3.3.4 The Division of Fire Safety will verify existence and/or good standing with the Secretary of State.
 - 3.3.5 The registration is valid from the time of issue to December 31st of the current year, unless earlier revoked or suspended. It must be renewed annually, on or before January 31st of each year.
- 3.4 Qualifications for Registration for sprinkler contractors: (Effective Date January 1, 2003)
 - 3.4.1 In order to become registered as a Fire Suppression Contractor, the Contractor must employ a Responsible Managing Employee, or
 - 3.4.2 Contractors without a Responsible Managing Employee on staff must demonstrate to the administrator their qualifications, including education, training and experience. The contractor will be required to submit documentation of at least 2.0 continuing education units (CEU's) annually. The CEU's must have been earned during the 12-months immediately preceding the date of application. The contractor will receive a specific amount of CEU's for various fire suppression development activities as depicted in the table below:

1. Participation as a student in a seminar related to fire suppression system conducted by a qualified organization, including but not limited to National Fire Protection Association, National Fire Sprinkler Association, American Fire Sprinkler Association, Oklahoma State University, National Fire Academy, or any other nationally recognized organizations approved by the administrator.	0.1 for each clock hour of attendance
2. Working for a minimum of five years in the fire sprinkler system industry as a designer and/or installer.	1.0 maximum annually
3. Active service on a committee or board service with a fire sprinkler association or organization.	0.5 per committee or board
4. Attendance at NFPA and/or ICC code development hearings related to fire sprinkler systems.	1.0 per hearing
5. Participated in an apprentice-training program with fire suppressions system industry organizations, for a minimum of five years.	0.1 maximum annually
6. Has tested as a fire sprinkler contractor and holds a current license or certification issued by another state or local jurisdiction, subject to approval of the Division of Fire Safety.	1.0 maximum
7. Multipurpose Contractor Only: Working for a minimum of five years in the residential plumbing industry as a Master Plumber	1.0 maximum

3.5 Procedures for Registration - Underground Contractor

In order to become registered as a fire suppression system contractor - "underground", the applicant must provide the administrator with all of the following documentation:

- 3.5.1 The applicant is a principal of the company as defined in Colorado Revised Statutes 24-33.5-1202 (8) and the company shall be recorded with the Colorado Secretary of State's Office.
- 3.5.2 The contractor must complete all parts of the application and sign it. The "Application for Registration" is an official document legally binding the contractor to the provisions of Colorado Revised Statutes and all rules adopted by the administrator that pertain to the installation of underground fire lines.
- 3.5.3 The contractor must carry general liability insurance that includes products and completed operations coverage related to their industry. The documentation submitted must include inclusions and exclusions of coverage.
- 3.5.4 The registration is valid from the time of issue to December 31st of the current year, unless earlier revoked or suspended. It must be renewed annually, on or before January 31st of each year.

3.6 Procedures for Registration - Backflow Contractors

In order to become registered as a fire suppression system contractor - "Backflow", the applicant must provide the administrator with all of the following documentation:

- 3.6.1 The applicant is a principal of the company as defined in Colorado Revised Statutes 24-33.5-1202 (8) and the company shall be recorded with the Colorado Secretary of State's Office.
- 3.6.2 The contractor must complete all parts of the application and sign it. The "Application for Registration" is an official document legally binding the contractor to the provisions of Colorado Revised Statutes and all rules adopted by the administrator that pertain to the installation of backflow prevention

- 3.6.3 The contractor must obtain carry general liability insurance that includes products and completed operations coverage related to their industry. The documentation submitted must include inclusions and exclusions of coverage.
- 3.6.4 The registration is valid from the time of issue to December 31st of the current year, unless earlier revoked or suspended. It must be renewed annually, on or before January 31st of each year.

3.7 Procedures for New Registration – Multipurpose Contractor

In order to become registered as a Fire Suppression System Contractor – Multipurpose, the applicant must provide the administrator with all documentation specified in Sections 3.3 and 3.4 and all of the following information.

- 3.7.1 The applicant shall be a principal of the company as defined in Colorado Revised Statutes 24-33.5-1202 (8) and the company shall be recorded and be listed in “good standing” with the Colorado Secretary of State’s Office.
- 3.7.2 The applicant shall complete all parts of the application and physically sign it. The “Fire Suppression Multipurpose System Application” is an official document legally binding the contractor to the provisions of Colorado Revised Statutes and all rules adopted by the administrator that pertain to the installation of combination fire suppression systems.
- 3.7.3 Applicants must demonstrate to the administrator their qualifications, including education, training, and experience in the plumbing and fire suppression industries.
- 3.7.4 If installing PEX-based systems, the applicant shall submit documentation proving successful completion of sprinkler system training by the specific manufacturer of the system they intend to install.
- 3.7.5 For proprietary multipurpose sprinkler installers, applicants shall demonstrate that they are authorized and certified by the system manufacturer to install the fire suppression systems.
- 3.7.6 Applicants shall demonstrate that they have received training in NFPA 13D residential sprinkler systems from a recognized, professional organization or applicable trade association. All training and education shall be within three (3) years of the application submittal to be considered eligible under this program.
- 3.7.8 Applicants shall demonstrate that they are or employ a Colorado registered Master Plumber in accordance with CRS 12-58-101 to comply with the regulations of the State Plumbing Board.
- 3.7.9 The applicant must carry general liability insurance that includes products and completed operations coverage related to the residential plumbing industry and to the installation of fire sprinkler systems, fire suppression systems, or life safety systems.
- 3.7.10 The registration is valid from the time of issue to December 31st of the current year, unless earlier revoked or suspended.

3.8 Posting of Registration

- 3.8.1 All fire suppression contractors are required to include their Colorado registration number on all plans and hydraulic calculations.

3.9 Qualifications for Registration – Residential Fire Suppression Systems Contractor

3.9.1 A residential fire suppression systems contractor must employ a RME,

—or—

Contractors without a RME on staff must demonstrate to the Division their qualifications including education, training, and experience in the residential fire suppression industry.

3.9.2 The applicant shall be required to submit documentation of successful completion of residential sprinkler system training, completion of NFPA 13D related coursework, or other residential suppression system training as approved by the Division. CSA Sprinkler Residential On-Site Competent Person Exam (ASR2) or Sprinkler Commercial/Residential On-Site Competent Person Exam (ASCR2) satisfies this experience requirement.

3.9.3 Before installing CPVC or PEX piping systems, the applicant must provide proof of successful completion of a CPVC or PEX tubing training course by the manufacturer or their representative.

3.9.4 Before installing a pre-engineered residential fire suppression system, applicants must demonstrate that they are authorized and certified by the system manufacturer to install that specific residential fire suppression system.

SECTION 4 FIRE SUPPRESSION SYSTEM INSPECTOR CERTIFICATION

4.1 Any installation, modification, alteration, or repair of a fire suppression system shall be approved by a certified fire suppression systems inspector. Each county, municipality, or special district that has fire suppression systems enforcement responsibilities shall, as needed, provide fire suppression systems inspectors certified to the appropriate level.

Exemption: Inspectors of MULTIPURPOSE RESIDENTIAL FIRE SPRINKLER SYSTEMS shall meet the requirements of the State Board of Plumbing and are not regulated by the Division

4.1.1 Individuals performing plan reviews on fire suppression systems other than residential sprinkler systems designed to NFPA 13D Standards shall be certified as Fire Suppression Systems Inspector—Plan Reviewer.

4.1.2 Individuals performing inspections on fire suppression systems other than residential sprinkler systems designed to NFPA 13D Standards shall be certified as Fire Suppression Systems—Inspector Or Fire Suppression Systems Inspector—Plan Reviewer.

4.1.3 Individuals performing plan reviews or inspections for compliance of residential sprinkler systems designed to NFPA 13D Standards shall be certified as Residential Fire Suppression Systems Inspector, Fire Suppression Systems—Inspector Or Fire Suppression Systems Inspector—Plan Reviewer.

4.2 In order to become certified as a Fire Suppression Systems Inspector – Plan Reviewer, a person must meet at least one of the following conditions:

4.2.1 Possess current and valid inspector certification issued by a nationally recognized organization which includes fire suppression system plan review and inspection knowledge. ICC Fire Inspector II or NFPA Certified Fire Inspector II certifications, and certified fire plans examiner issued by ICC or NFPA meet this requirement.

- 4.2.2 Demonstrate to the Division that he or she has met equivalent qualifications, including education, training and experience, in the categories of fire suppression, fire sprinkler, or life safety.
- A. Prerequisite Knowledge, Skill and Ability Required:
- (1) Plan review of fire suppression systems.
 - (2) Understand the application of NFPA Standards related to fire suppression systems.
 - (3) Sprinkler system identification and components, including: quick response sprinklers; residential sprinklers, early suppression fast response sprinklers; and large drop sprinklers.
 - (4) Sprinkler system installation requirements, including: spacing, obstruction rules, response time index and design densities.
 - (5) Water supply and pressure requirements.
 - (6) Hydraulic calculations.
 - (7) Inspection, testing and maintenance procedures for: sprinklers, standpipes, private fire service mains, fire pumps, and valves and controls.
 - (8) System impairment, notification and correction.
 - (9) Flow test and fire pump testing procedures.
 - (10) Understand the application of Colorado Law for fire suppression systems.
 - (11) Understand the application of the International Building Code, International Residential Code, and International Fire Code to fire suppression systems.
- B. Acceptable equivalent qualifications are:
- (1) Associate Degree or above in Fire Science, Fire Prevention, or other fire inspection major from a regionally accredited post-secondary institution.
 - (2) Currently registered in Colorado as engineer specializing in fire suppression.
 - (3) Currently registered as a NICET Level III or above in Water Based Layout.
 - (4) At the Division's sole discretion, evidence of completion of courses that directly relate to plan review and inspections of fire suppression systems delivered by a recognized organization or institution, including, but not limited to:
 - (a) A regionally accredited post-secondary institution

- (b) National Fire Protection Association
 - (c) National Fire Academy
 - (d) American Fire Sprinkler Association
 - (e) National Fire Sprinkler Association
 - (f) IFMA Fire Protection Institute
 - (g) International Code Council
- 4.2.1 Submit evidence of current and valid certification in another state or jurisdiction, which is determined by the Division to be at least equivalent to the requirements of the Colorado Fire Suppression Program.
- 4.3 In order to become certified as a Fire Suppression Systems - Inspector, a person must meet the following conditions:
 - 4.3.1 Possess current and valid inspector certification issued by a nationally recognized organization which includes fire suppression systems inspection knowledge. ICC Fire Inspector II or NFPA Certified Fire Inspector II certifications meet this requirement.
 - 4.3.2 Demonstrate to the Division that he or she has met equivalent qualifications, including education, training and experience, in the categories of fire suppression, fire sprinkler, or life safety.
 - A. Prerequisite Knowledge, Skill and Ability Required:
 - (1) Understand the application of NFPA Standards related to fire suppression.
 - (2) Sprinkler system identification and components, including: quick response sprinklers, residential sprinklers, early suppression fast response sprinklers, and large drop sprinklers.
 - (3) Sprinkler system installation requirements, including: spacing, obstruction rules, response time index and design densities.
 - (4) Water supply and pressure requirements.
 - (5) Inspection, testing and maintenance procedures for: sprinklers, standpipes, private fire service mains, fire pumps, and valves and controls.
 - (6) System impairment, notification and correction.
 - (7) Flow test and fire pump testing procedures.
 - (8) Understand the application of Colorado Law for fire suppression systems.
 - (9) Understand the application of the International Building Code, International Residential Code, and International Fire Code to fire suppression systems.

B. Acceptable equivalent qualifications are:

- (1) Currently registered as a NICET Level II in Water Based Layout.
- (2) At the Division's sole discretion, evidence of completion of courses that directly relate to plan review and inspections of fire suppression systems delivered by a recognized organization or institution, including, but not limited to:
 - (a) A regionally accredited post-secondary institution
 - (b) National Fire Protection Association
 - (c) National Fire Academy
 - (d) American Fire Sprinkler Association
 - (e) National Fire Sprinkler Association
 - (f) IFMA Fire Protection Institute
 - (h) International Code Council

4.3.3 Submit evidence of current and valid certification from another state or jurisdiction which is determined by the Division to be at least equivalent to the requirements of the Colorado Fire Suppression Program.

4.4 In order to become certified as a Residential Fire Suppression Systems Inspector, a person must meet the following conditions:

4.4.1 Possess current and valid inspector certification issued by a nationally recognized organization which includes residential fire suppression system plan review and inspection knowledge. ICC Fire Inspector II, ICC Residential Fire Sprinkler Inspector/Plans Examiner, ICC Residential Fire Sprinkler Design/Installation, or NFPA Certified Fire Inspector II certifications meet this requirement.

4.4.2 Demonstrate to the Division that he or she has met equivalent qualifications, including education, training and experience, in the categories of fire suppression, fire sprinkler, or life safety.

A. Prerequisite Knowledge, Skill and Ability Required:

- (1) Understand the application of the NFPA 13D Standard related to the residential fire suppression industry.
- (2) Sprinkler system identification and components, including: quick response sprinklers, residential sprinklers, freeze protection, pumps, water storage, and alarm devices
- (3) Sprinkler system installation requirements, including: spacing, obstruction rules, response time index, pipe use, and design densities.
- (4) Water supply and pressure requirements including loss of pressure through water meters, cross-connection devices, and other appurtenances.

- (5) Inspection, testing and maintenance procedures for: sprinklers, fire pumps, expansion tanks, freeze protection systems, valves, and controls.
- (6) Flow test and fire pump testing procedures.
- (7) Understand the application of Colorado Law for fire suppression systems.
- (8) Understand the application of the International Residential Code, and International Fire Code to fire suppression systems.

B. Acceptable equivalent qualifications are:

- (1) Currently registered as a NICET Level II in Water Based Layout.
- (2) At the Division's sole discretion, evidence of completion of courses that directly relate to plan review and inspections of residential fire suppression systems delivered by a recognized organization or institution, including, but not limited to:
 - (a) A regionally accredited post-secondary institution
 - (b) National Fire Protection Association
 - (c) National Fire Academy
 - (d) American Fire Sprinkler Association
 - (e) National Fire Sprinkler Association
 - (f) IFMA Fire Protection Institute
 - (h) International Code Council

4.4.3 Submit evidence of current and valid certification from another state or jurisdiction which is determined by the Division to be at least equivalent to the requirements of the Colorado Fire Suppression Program.

4.5 All applications for certification must be accompanied by a letter from the applicant's employer's code official responsible for plan review and inspection services attesting:

- 4.5.1 That the individual is currently employed by a county, municipality, special district, or state agency that has fire suppression system enforcement responsibility.
- 4.5.2 That the agency is responsible for fire suppression system enforcement in their jurisdiction.
- 4.5.3 That the individual has the responsibility to conduct fire suppression system plans reviews and/or inspections.
- 4.5.4 That the individual meets the qualifications (knowledge, skills and ability) to conduct fire suppression system plan reviews and/or inspections.

4.6 Limitations/Permissible Activities.

- 4.6.1 A certified fire suppression systems inspector may not also be a registered contractor.
- 4.6.2 A certified fire suppression systems inspector may not contract directly with a registered contractor for the provision of inspection services.
- 4.6.3 A certified fire suppression systems inspector may contract directly with one or more municipalities, counties, fire protection districts or other local authority for the provision of inspection services.

4.7 Duration of Certification

- 4.7.1 Fire suppression systems inspector certifications are valid for a period of three years from the date of issuance, unless earlier suspended or revoked
- 4.7.2 Certified inspectors who are separated from employment may not perform plan review or inspection services unless they become employed with a new agency and provide a letter pursuant to Section 4.5.

4.8 Renewal of certification is the responsibility of the certified individual. An individual who is certified as a fire suppression systems inspector prior to the adoption of these rules may perform all of the responsibilities of a Fire Suppression Systems Inspector – Plan Reviewer. Upon application for renewal he or she will be certified as a Fire Suppression Systems Inspector – Plan Reviewer.

4.8.1 Renewal shall require an application accompanied by the following:

- A. A letter in accordance with 4.5, AND
- B. Documentation of 2.4 continuing education units (CEUs) relevant to the field of fire suppression, AND
- C. Payment of the required renewal fee.

- 4.8.2 CEUs will be granted for professional development activities as depicted in the table below: (Applicants must obtain documentation and keep records of each activity attended during the certification period).

1) Participation as a student in a seminar related to fire suppression systems conducted by a qualified organization, including but not limited to National Fire Protection Association, National Fire Sprinkler Association, American Fire Sprinkler Association, Oklahoma State University and National Fire Academy Fire Marshals Association of Colorado training sessions etc.	0.1 per clock hour of attendance
2) International Code Council Education Institute. Courses must be relevant to fire suppression systems	0.1 for each clock hour of attendance
3) Fire code, building code overview classes	0.4 Maximum Per course
4) Attendance at NFPA and/or ICC code development hearings related to fire sprinkler systems.	1.0 per three year period
5) Working as a certified fire suppression inspector, conducting plans review and inspections of fire sprinkler systems during each renewal period.	1.0 per three year period

- 4.9 Municipalities, counties, fire protection districts, and other state or local authorities employing certified Fire Suppression Systems Inspectors must maintain records of all plan reviews and inspections conducted by each inspector during the three year certification period. Said records shall be made available for review by the Division, upon request.
- 4.10 Inspectors must place their certification number and expiration date on all completed inspection reports, permits, and inspection cards.

SECTION 5 PLANS REQUIRED INSPECTIONS

- 5.1 Every registered fire suppression system contractor must register all plans, along with product data sheets and hydraulic calculations prior to all installation, fabrication, modification, or alteration project of any fire suppression system in the State of Colorado. The plans and hydraulic calculations must bear the signature of a P.E. or NICET level III or above. This signature attests to the fact that the plans have been reviewed and meet the intent of the standard. The contractor must file the required documents for registration with the local authority that employs a certified fire suppression system inspector.
- 5.2 If the local jurisdiction does not have a certified fire suppression inspector, the required documents for registration shall be filed with the Colorado Division of Fire Safety for review. When submitting to the Division, a minimum of three sets of plans and hydraulic calculations shall be provided. Once reviewed and acted on by the Division, one full set of plans must be sent to the local jurisdiction by the contractor.

- 5.3 To ensure that only qualified inspectors are conducting plan reviews and inspections and to prevent jeopardizing contractor registration, the contractor shall determine that the inspector is certified by: (a) verify on the Colorado Division of Fire Safety's web site that an inspector holds a current and valid certification. (b) requesting the inspector's certification number; or (c) contacting the Division of Fire Safety to confirm that the inspector holds current and valid certification.
- 5.4 Every registered fire suppression system contractor must complete and maintain inspection reports, in accordance with the applicable NFPA standard, for each repair, maintenance, and inspection performed on any fire suppression system in the State of Colorado.
 - 5.4.1 Such inspection reports shall be maintained for a period of no less than three years. Copies of the inspection report must be submitted to the local authority having jurisdiction, unless the contractor is notified in writing by the local authority that they do not wish to receive such reports.
 - 5.4.2 Records of inspection and inspection reports shall be made available for review by the Administrator.
- 5.5 Fire Suppression System Installations.
 - 5.5.1 The above ground sprinkler piping must be visible and accessible for inspection by a certified fire suppression systems inspector, and approved prior to occupancy.
 - 5.5.2 A "Contractor's Material and Test Certificate for Aboveground Piping" must be completed with all above test results documented and copies provided to the owner and certified fire suppression system inspector by the contractor.
 - 5.5.3 Fire Suppression Contractors—Multipurpose shall provide, or demonstrate to a Certified Suppression Inspector, flow verification tests, commonly referred to as a bucket test, to confirm that the system's performance meets or exceeds the flow requirements as indicated by approved hydraulic calculations, manufacturer's specifications, or pretested limitations.
- 5.6 Small Projects
 - 5.6.1 Small projects are defined as any work involving the addition or relocation of less than 20 sprinkler heads. Completed work cannot have an adverse affect on the integrity of the existing fire protection system, including the hydraulic design.
 - 5.6.2 A scale drawing of the proposed project on an 8 1/2 x 11 inch paper, including product data sheets, calculations, and all information required by the applicable NFPA standard may, upon request, be permitted for submittal to the certified fire suppression inspector in lieu of a full set of blue prints. The certified fire suppression system inspector has the right to require additional information as may be necessary to fully evaluate the project.
 - 5.6.3 A signed letter on the registered contractor's letterhead explaining the scope of work, start and completion dates, and a statement that tenant finish, remodel, or additions do not affect the hydraulic demand design or integrity of the existing fire protection system is also required for submittal to the administrator or the local certified fire suppression inspector. The authority having jurisdiction may require hydraulic calculations.
 - 5.6.4 If it is likely that the hydraulic design or integrity of the existing fire protection system has been affected by the scope of work, or if the owner, contractor, or authority having jurisdiction has concerns about the system integrity, a NICET Level III or above or a professional engineer review shall be required.

5.7 Underground Piping used for Fire Protection Supply Lines

- 5.7.1 The underground supply line installed between the public water main and the fire protection system riser must be installed in accordance with NFPA Standard 24 or NFPA 13 chapter 10, Private Fire Service Mains and their appurtenances.
- 5.7.2 All underground supply lines shall be installed by registered underground contractors and shall be inspected by qualified inspectors. The hydrostatic and flush tests shall be witnessed and test papers signed by the local Authority Having Jurisdiction or the general contractor if approved by the local authority.
- 5.7.3 A copy of the "Contractor's Material and Test Certificate for Underground Piping" must be completed and provided to the fire sprinkler contractor, certified fire suppression system inspector and the owner by the installing contractor prior to connection of the fire sprinkler riser.
- 5.7.4 The Authority Having Jurisdiction may require flushing of the aboveground sprinkler piping if approved documentation of the required tests for the underground piping cannot be provided.

5.8 Additional Conditions

- 5.8.1 Flow tests on water supply systems must be less than one year old, unless approved by the certified fire suppression system inspector having jurisdiction.
- 5.8.2 When calculating water supply requirements for new installations, deduct ten (10) percent to a maximum of (10) psi from the static and residual pressure. Show the actual flow and reduction on hydraulic calculation sheets.
 - 5.8.2.1 Exemption. 13D (One and two family dwellings) are exempt from 5.8.2 unless required by the local authority.
- 5.8.3 Design of residential multipurpose sprinkler systems shall account for all pressure losses through installed water meters and water treatment equipment.

5.9 Exemptions. The following projects are exempted from plan submittal, inspection, and approval requirements:

- 5.9.1 Pre engineered range hoods and duct extinguishing systems.
- 5.9.2 Any work described in this Section 5 that is conducted at any facility owned and operated by a mining company.

SECTION 6 CODES AND STANDARDS ADOPTED

6.1 The following codes are adopted by the Division for the design, installation, and maintenance of fire suppression systems within the State of Colorado.

- 6.1.1 International Building Code, 2015 Edition, First Printing: May 2014 (Copyright 2014 by International Code Council, Inc. Washington, D.C.).
- 6.1.2 International Fire Code, 2015 Edition, First Printing: May 2014 (Copyright 2014 by International Code Council, Inc. Washington, D.C.).

- 6.1.3 International Residential Code, 2015 Edition, First Printing: May 2014 (Copyright 2014 by International Code Council, Inc. Washington, D.C.).
- 6.1.4 International Wildland-Urban Interface Code, 2015 Edition, First Printing: May 2014 (Copyright 2014 by International Code Council, Inc.).
- 6.1.5 NFPA 101, Life Safety Code, 2012 Edition, First Printing: September 2011 (Copyright 2011 by National Fire Protection Association).
- 6.2 The following standards are adopted by the Division for the design, installation, and maintenance of fire suppression systems within the State of Colorado.
 - NFPA 11 Standard for Low, Medium, and High Expansion Foam, 2010 Edition (Copyright 2009 by National Fire Protection Association Inc.).
 - NFPA 12 Standard for the Installation of Carbon Dioxide Extinguishing Systems, 2011 Edition (Copyright 2010 by National Fire Protection Association Inc.).
 - NFPA 12A Standard for the Installation of Halon 1301 Fire Extinguishing Systems, 2009 Edition. (Copyright 2008 by National Fire Protection Association Inc.).
 - NFPA 13 Standard for the Installation of Sprinkler Systems, 2013 Edition (Copyright 2012 by National Fire Protection Association Inc.).
 - NFPA 13D Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes, 2013 Edition (Copyright 2012 by National Fire Protection Association Inc.).
 - NFPA 13R Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies, 2013 Edition (Copyright 2012 by National Fire Protection Association Inc.).
 - NFPA 14 Standard for the Installation of Standpipe and Hose Systems, 2013 Edition (Copyright 2013 by National Fire Protection Association Inc.).
 - NFPA 15 Standard for Water Spray Fixed Systems for Fire Protection, 2012 Edition (Copyright 2011 by National Fire Protection Association Inc.).
 - NFPA 16 Standard for the Installation of Foam-Water Sprinkler and Foam-Water Spray Systems, 2011 Edition (Copyright 2010 by National Fire Protection Association Inc.).
 - NFPA 17 Standard for Dry Chemical Extinguishing Systems, 2013 Edition (Copyright 2013 by National Fire Protection Association Inc.).
 - NFPA 17A Standard for Systems Wetting Agents, 2011 Edition (Copyright 2013 by National Fire Protection Association Inc.).
 - NFPA 20 Standard for the Installation of Stationary Pumps for Fire Protection, 2013 Edition (Copyright 2009 by National Fire Protection Association Inc.).
 - NFPA 22 Standard for Water Tanks for Private Fire Protection, 2013 Edition (Copyright 2012 by National Fire Protection Association Inc.).
 - NFPA 24 Standard for the Installation of Private Fire Service Mains and Their Appurtenances, 2013 Edition (Copyright 2012 by National Fire Protection Association Inc.).

- NFPA 25 Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems, 2014 Edition (Copyright 2013 by National Fire Protection Association Inc.).
- NFPA 72 National Fire Alarm and Signaling Code, 2013 Edition (Copyright 2012 by National Fire Protection Association Inc.).
- NFPA 409 Standard on Aircraft Hangars, 2011 Edition (Copyright 2010 by National Fire Protection Association Inc.).
- NFPA 418 Standard for Heliports, 2011 Edition (Copyright 2018 by National Fire Protection Association Inc.).
- NFPA 423 Standard for Construction and Protection of Aircraft Engine Test facilities, 2010 Edition (Copyright 2009 by National Fire Protection Association Inc.).
- NFPA 750 Standard on Water Mist Fire Protection Systems, 2015 Edition (Copyright 2014 by National Fire Protection Association Inc.).
- NFPA 1142 Standard on Water Supplies for Suburban and Rural Firefighting, 2012 Edition (Copyright 2011 by National Fire Protection Association Inc.).
- NFPA 2001 Standard on Clean Agent Fire Extinguishing Systems, 2012 Edition (Copyright 2011 by National Fire Protection Association Inc.).
- 6.3 The Division shall maintain copies of the complete texts of the adopted codes and standards, which are available for public inspection during regular business hours. Interested parties may inspect the referenced incorporated materials and/or obtain copies of the adopted codes for a reasonable fee by contacting the Fire and Life Safety Section Chief at the Division, 690 Kipling St, Lakewood, CO, and/or The State Depository Libraries. Copies of the adopted codes and standards are available from the organization originally issuing the codes and standards: the International Code Council, Inc., through the International Code Council Regional Office Bookstores, reached by calling 888-ICC-SAFE or on the web at www.iccsafe.org, and the National Fire Protection Association, reached by calling 800-344-3555 or on the web at www.nfpa.org.
- 6.4 In the event that a new edition of the code or standard is adopted, the code or standard current at the time of permit application shall remain in effect throughout the work authorized by the permit.
- 6.5 This rule does not include later amendments or editions of the incorporated material.
- 6.6 In the case of any conflicting requirements between any code or standard adopted by the Division, the Division, in its sole discretion, shall determine which provisions shall apply.
- 6.6 Municipalities, counties, fire protection districts, and other units of local government having the authority to do so, may adopt codes, standards, ordinances and/or resolutions governing the design and installation of fire suppression systems that may be different than those adopted by the Division.
- 6.6.1 Municipalities, counties, fire protection districts and other local authorities employing certified fire suppression inspectors may enforce locally adopted codes, standards ordinances and/or resolutions governing the design and installation of fire suppression systems, to the extent permitted by the adopting ordinance or resolution.

- 6.6.2 Conflicts between the codes and standards adopted by the Division and those adopted by a local government shall be resolved in the following manner:
- A. In cases where the local authority employs certified fire suppression systems inspectors, the local government requirements shall prevail.
 - B. In cases where the local authority does not employ certified fire suppression systems inspectors and the Division conducts plan reviews and inspections, the more restrictive requirements shall prevail.

SECTION 7 COMPLAINTS

This section concerns the receiving, investigating and acting upon complaints against any person who violates the provisions of Colorado Revised Statutes (C.R.S.) 24 33.5 1206.5 through 1206.6 or any rule adopted by the Administrator.

- 7.1 Complaints alleging violation of any provision of C.R.S. 24 33.5 1206.5 through 1206.6 or any rule adopted by the Administrator shall be filed with the Colorado Division of Fire Safety, Fire Suppression Program Administrator. A complaint form may be accessed on the Division of Fire Safety's website or the complaint may be submitted to the Colorado Division of Fire Safety at 9195 East Mineral Avenue, Suite 234, Centennial, CO 80112.
- 7.1.1 The Division may act on anonymous complaints or those made by complainants who desire to remain anonymous. However, individuals submitting complaints should be aware that such complaints are public records and may be available to the public for inspection in accordance with the Colorado Public Records Act '24 72 201 C.R.S. et seq.
- 7.2 The Administrator will investigate or cause to be investigated the information contained in the complaint. If proper evidence can be found to substantiate that a violation of C.R.S. 24 33.5 1206.5 through 1206.6 or current rules have occurred, the Administrator will proceed pursuant to C.R.S. 24-33.5-1204.5(1)(e).
- 7.3 Should Division staff or the Administrator determine that it is necessary to conduct a hearing, the Division of Fire Safety will utilize the services of the Colorado Division of Administrative Hearings to conduct a hearing in accordance with the Colorado Administrative Procedures Act (C.R.S. 24 1 101 et seq.).
- 7.4 Penalties and fines for violating any provision of C.R.S. 24 33.5 1206.5 through 1206.6 or these rules.
- 7.4.1 In addition to any other civil or criminal penalties that may be prescribed by a court of competent jurisdiction, Division staff or the Administrator may assess a penalty and/or fine for any conduct determined, after investigation, to constitute a violation of these rules, that in the opinion of Division staff or the Administrator does not constitute an imminent threat to public health, safety, or welfare.
- 7.4.2 Such penalties and/or fines shall be in the form of admonition for the alleged violation.
- 7.4.3 The penalties and fines for violating any provision C.R.S. 24 33.5 1206.5 through 1206.6 or these rules, shall generally be as follows:
- A. First Violation Warning (Corrective Action)
 - B. Second Violation Letter of Admonition

- C. Third Violation Letter of Admonition and \$250.00 fine.
 - D. Any subsequent violation(s) shall result in a hearing on revocation pursuant to C.R.S. 24-33.5-1204.5(1)(e) and the Colorado Administrative Procedures Act (C.R.S. 24 1 101 et seq.), and final agency action.
- 7.4.4 Nothing in Rule 7.4.2 above shall be construed to require the nature of subsequent violations be related to the nature of the first violation.
- 7.4.5 Nothing in Rule 7.4.2 above shall be construed to prevent the Administrator or Division staff from referring any violation of the statute or these rules to the Division of Administrative Hearings for the filing of charges.
- 7.4.6 Division staff is required, upon the issuance of a second letter of admonition, for whatever cause, to refer any subsequent violations to the Division of Administrative Hearings for the filing of charges.
- 7.4.7 Any violation which, in the decision of Division staff or the Administrator, constitutes an imminent threat to public health, safety, or welfare shall result in immediate suspension of the contractor's registration pending a hearing on revocation pursuant to C.R.S. 24-33.5-1204(1)(e) and the Colorado Administrative Procedures Act (C.R.S. 24 1 101 et seq.), and final agency action.
- 7.4.8 Any contractor who feels aggrieved by the decision, order or actions of Division staff or the Administrator may request a hearing in accordance with the Colorado Administrative Procedures Act (C.R.S. 24 1 101 et seq.).
- 7.4.9 Any contractor who feels aggrieved by the decision, order or actions of the Administrator following final agency action may seek judicial relief pursuant to the provisions of C.R.S. 24 4 106.

SECTION 8 FEES AND CHARGES ESTABLISHED

- 8.1 The Division will charge the following fees for services:
- 8.1.1 Annual Registration of Fire Suppression Systems Contractor...\$100.00
 - 8.1.2 Replacement of lost or damaged registration & certification.....\$10.00
 - 8.1.3 Plan reviews, job site inspections, testing, or technical assistance to other agencies, including travel to and from job site (one hour minimum).....\$100.00 per hour
 - 8.1.4 Certification or Renewal of Fire Suppression Systems Inspectors through document review..... \$30.00
 - 8.1.5 Certification or Renewal of Fire Suppression Systems Inspectors by reciprocity of equivalent ICC or NFPA certifications.....\$10.00
 - 8.1.6 Compliance Inspection Fee per Hotel or Motel Fire Alarm and Fire Suppression System.....100.00
- 8.2 The above fees and charges apply only for Division services. Local jurisdictions having certified fire suppression systems inspectors may establish their own permit fees, plan review and inspection fees, and other charges.

SECTION 9 SEVERABILITY

- 9.1 If any provision of these rules and regulations or the application thereof to any person or circumstance is held invalid for any reason, the invalidity shall not affect the other provisions of these rules and regulations which can be given effect without the invalid provisions. To this end, all provisions of these rules and regulations are declared to be severable.

SECTION 10 INQUIRIES

- 10.1 Questions, clarification, or interpretation of these rules should be addressed in writing to: Fire Suppression Program Administrator, Colorado Division of Fire Safety, 9195 East Mineral Avenue Suite 234, Centennial, CO 80112. Telephone number: (720) 852-6735.

Editor's Notes

History

Entire rule eff. 12/30/2009.

Sections 3.9, 4, 6, 8 emer. rules eff. 12/30/2014.