



Colorado Division of Fire Prevention & Control, Fire & Life Safety Section

Partnering with Colorado's Fire Professionals to Protect Our Citizens from Fire

November 24, 2015

Colorado Backflow Preventer Education Council of Colorado, Westminster, Colorado

WHO IS THIS GUY?

- CFEII, CFPS, CFPE, Fire Inspector II...
- National Faculty in Fire and Life Safety Code for Federal Government
- MS in Organizational Leadership
- Former Paid Firefighter (Still Volunteer)
- Involved With Buildings and Fire Safety For Nearly 20 Years
- DFPC Fire & Life Safety Deputy Section Chief





OBJECTIVES

- Create an understanding of the Colorado Division of Fire Prevention & Control, Fire & Life Safety Section's programs and codes as they apply to Backflow Preventers.

WHO IS DFPC?



The mission of the Colorado Division of Fire Prevention & Control (DFPC) is:

“...to provide leadership and support to Colorado communities in reducing threats to lives, property and the environment from fire through fire prevention and code enforcement; wildfire preparedness, response, and management; and the training and certification of firefighters.”

The *Fire and Life Safety Section* of DFPC is tasked with ensuring (through partnerships with local fire and building safety officials, fire safety professionals, and property owners) the safety of the State’s schools and community colleges, licensed health facilities, fire suppression systems, casinos, waste tire facilities, and fireworks facilities.

WHAT DOES DFPC HAVE TO DO WITH FIRE SUPPRESSION SYSTEMS?



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.

The C.R.S. mandates (and DFPC rules reinforce) that all installers of fire suppression systems shall be qualified and registered with DFPC.

The statutes and rules also mandate that any installation, modification, alteration, or repair of a fire suppression system shall be approved by a fire suppression systems inspector certified by the DFPC

WHAT DOES DFPC HAVE TO DO WITH FIRE SUPPRESSION SYSTEMS?



Construction Plan Review:

- 1) If there are local jurisdictions willing and capable who have state certified fire suppression system inspectors, DFPC may not do any construction plan review.
- 2) If DFPC is requested to do plan review on behalf of the local fire jurisdiction we use a traditional permitting process for both Building and/or Fire Code review.
- 3) DFPC can provide for pre-submittal plan review conferences to address design challenges and concerns with the design team and/or the local officials.

DOES DFPC DO ONGOING INSPECTIONS FOR SUPPRESSION SYSTEMS?



Ongoing Inspections and Complaints:

- 1) Ongoing inspections and testing of fire suppression systems are generally made by the fire sprinkler company and backflow prevention contractor the property owner contracts with to maintain their systems. Some maintenance activities are the responsibility of the property owner and likewise can be contracted for. Local fire inspectors may ask for evidence that the system is being maintained per NFPA 25.
- 2) DFPC is glad to coordinate with local officials on complaint investigations related to either an installer or inspector.

SO WHAT ABOUT THE CODES???



For codes for Suppression Systems related to Backflow Preventers installed in Colorado DFPC has adopted the:

2015 edition of the International Fire Code
NFPA 20 & 22 – 2012 Edition
NFPA 13, 13R, 13D, 14, 24 – 2013 Edition
NFPA 25 – 2014 Edition

(HEALTH FACILITIES MAY ALSO FALL UNDER THE 2012 AND/OR 2000 LIFE SAFETY CODE)

DO I HAVE TO DO PLAN REVIEW TO RETROFIT A BACKFLOW PREVENTER ON A SUPPRESSION SYSTEM?



NFPA 13(2013) Section 8.17.4.6.2:

“Retroactive Installation. When backflow prevention devices are to be retroactively installed on existing systems, a thorough hydraulic analysis, including revised hydraulic calculations, new fire flow data, and all necessary system modifications to accommodate the additional friction loss, shall be completed as a part of the installation.”

SO WHO CAN DO THE DESIGN WORK TO RETROFIT A BACKFLOW PREVENTER ON A SUPPRESSION SYSTEM?



Colorado Revised Statutes (CRS 24-33.5-1206.2 (2) (a)):

Any working plans and hydraulic calculations submitted for review by the administrator or by a certified local fire suppression inspector...must bear the signature and certification number of either a licensed professional engineer or a level three or higher engineering technician (fire suppression engineering technology – automatic sprinkler design or fire suppression engineering technology – special hazards system layout), whichever is relevant to the particular job or design, certified by the national institute for the certification of engineering technologist. Such licensed professional engineer or engineering technician shall certify that he or she has reviewed the plan and design and finds that it meets the applicable standards adopted by the administrator for fire safety and that it is adequately designed to meet the system requirements.

DFPC Regulations (8CCR1507-11) Section 6.3.5:

Plans and hydraulic calculations must bear the signature of a P.E. or NICET level III or above. This signature attest that the plans have been reviewed and meet the intent of the standard.

SO WHO CAN DO THE INSTALL WORK TO RETROFIT A BACKFLOW PREVENTER ON A SUPPRESSION SYSTEM?



DFPC Regulations (8CCR1507-11) Section 3.2.4:

Individuals or companies conducting installation, maintenance, service or testing of backflow prevention devices installed on fire sprinkler systems must be registered as "FIRE SUPPRESSION SYSTEM CONTRACTOR – BACKFLOW."

Requirements to Become Registered:

- 1) Complete application to DFPC
- 2) Liability insurance of at least \$1 million including products and completed operations coverage related to installation of suppression systems
- 3) Company registered with the Colorado Secretary of State
- 4) Must employ cross-connection control technicians holding 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.

SO WHO DO I SUBMIT MY PLANS TO? -SPRINKLER SYSTEMS-



Local Fire Department with Certified Fire Suppression Inspectors
(DFPC.STATE.CO.US)

DFPC - NO
Local Fire – YES

Local Fire Dept does not have (or contract with) Certified Fire Suppression Inspectors

DFPC - YES
Local Fire – YES (Advisory)

SO WHO DO I SUBMIT MY PLANS TO? -HEALTH FACILITIES-



Certified Health Facility (Participates in Federal Medicare or Medicaid Programs)

DFPC - YES
Local Building – YES
Local Fire – YES

Licensed Only Health Facility (No Federal Medicare or Medicaid Programs)

DFPC - YES (Advisory only if qualified local Bldg and Fire Depts)
Local Building – YES
Local Fire - YES

HOW DO I CONTACT DFPC?



Robert Sontag, MS
Prevention Branch Chief
Fire & Life Safety Section

MAIN NUMBER: 303.239.4100

P 303.239.4103 | F 303.239.5887

700 Kipling St., Suite 4100, Lakewood, CO 80215

robert.sontag@state.co.us | www.dfpc.state.co.us

TWITTER: @COStateFire

FACEBOOK: CODivFirePrevControl



Q&A