

Welcome! to “Fire Sprinklers on UC Campuses”

To listen to this webinar:

One tap mobile

+16699006833,,432765947# US (San Jose)

+16468769923,,432765947# US (New York)

Dial by your location

+1 669 900 6833 US Toll (San Jose)

+1 646 876 9923 US Toll (New York)

*4 (from UCOP office phone)

Meeting ID: 432 765 947

We will begin shortly.



Join Zoom Meeting

<https://UCOP.zoom.us/j/432765947>



What you need to know!



Webinar: FIRE SPRINKLERS on UC CAMPUSES



Today's Presenters

Mark Meredith,
Senior Counsel, OGC

Josephine Ortega, AIA, C.B.O
Construction Specialist, UCOP



Webinar: FIRE SPRINKLERS on UC CAMPUSES



Learning Objectives:

- **Review the new fire sprinkler certification requirements**
- **Learn how the Bulletin impacts UC and who enforces it**
- **Learn how the regulation impacts UC contracting**



CALIFORNIA STATE FIRE MARSHAL RESPONSIBILITIES

- Enforcement of building standards adopted by the State Fire Marshal and published in the California Building Standards Code relating to fire and panic safety and other regulations of the State Fire Marshal



CALIFORNIA

Health and Safety Code 13146

- Section 13146
 - (e) The SFM shall enforce the building standards and other regulations of the SFM on all University of California campuses and properties administered or occupied by the University of California. For each university campus or property the SFM may delegate that responsibility to the person of his or her choice who shall be known as the Designated Campus Fire Marshal



UC FIRE MARSHAL PROGRAM

- Individuals are hired by the University – UC employees, not OSFM employees
- MOU delegates authority to Designated Campus Fire Marshal
- MOU establishes education and experience criteria for DCFM positions
- Gives OSFM right to review qualifications and confirm or deny DCFM status



INFORMATION BULLETIN 17-002

- Issued on May 25, 2017
- Requires certification for anyone who installs or repairs water protection systems
- All fitters must possess certification card
- All trainees and apprentices must be registered
- Describes work covered
- Sets forth requirements to obtain certification



INFORMATION BULLETIN 17-002

WORK COVERED

- All UC properties and UC occupied and leased facilities on campuses and off-site facility locations in California are required to comply with the Bulletin
- Work consisting of the installation, alteration or repair of all water-based fire protection systems



INFORMATION BULLETIN 17-002

WORK COVERED

- Includes wet, dry, pre-action, and deluge sprinkler systems, small hose connections, standpipe systems, private fire service mains and their appurtenances, hydrants and monitor nozzles, water spray systems, foam water systems, fire pumps, water storage tanks, low, medium, and high expansion foam systems, and water mist systems.



FIRE SPRINKLER CERTIFICATION REQUIREMENTS

- Be at least 16 years old.
- Active C-16 holder or have successfully completed a California State or federally-approved Fire Sprinkler Fitter Apprenticeship Program
- File a Fire Sprinkler Fitter Certification Application (AES 1005) and pay the \$150 application fee
- Pass written certification examination. This exam is conducted by a third-party CAL FIRE



FIRE SPRINKLER APPRENTICESHIP REQUIREMENTS

- Be at least 16 years old.
- Registered in a State of California or federally-approved Fire Sprinkler Fitter Apprenticeship Program.
- Proof of employment by a licensed C-16.
- Work under the direct supervision of a Certified Fire Sprinkler Fitter.
- File an Apprentice/Trainee Registration Application (AES 1005A) and pay the \$150 application fee.



SPRINKLER FITTERS CERTIFICATION



CAL FIRE – Office of the State Fire Marshal Information Bulletin 17- 002

Issued: May 25, 2017

NEW Automatic Fire Extinguishing Systems Certification (Water-Based Fire Protection) CCR, Title 19, Division 1, Chapter 5.5

Following the passage of [Assembly Bill 433](#) in 2013 new regulations will go into effect July 1, 2017 requiring Automatic Fire Extinguishing Systems (AES) Sprinkler Pipefitters to be certified by the CAL FIRE - Office of the State Fire Marshal (CAL FIRE – OSFM). The new regulations will require anyone who installs or repairs water-based fire protection systems to possess the necessary skills and qualifications to safely and properly install the system so that it will be operable in its time of need.

The new law added Section 13110 to the Health and Safety Code which authorized the State Fire Marshal to propose, adopt, and administer the regulations he/she deems necessary to ensure fire safety in buildings and structures within this state. Regulations were developed with the help of a workgroup consisting of representatives from industry, labor, enforcing agencies, and CAL FIRE – OSFM staff.

Work Covered

- Work consisting of the installation, alteration or repair of all water-based fire protection systems including: wet, dry, pre-action, and deluge sprinkler systems, small hose connections, standpipe systems, private fire service mains and their appurtenances, hydrants and monitor nozzles, water spray systems, foam water systems, fire pumps, water storage tanks, low, medium, and high expansion foam systems, and water mist systems.
- Includes all occupancies required to have a fire sprinkler system, or those voluntarily installed fire sprinkler systems, except one- and two-family dwellings.

Page 1 of 3

Informational Bulletin 17-002

■ Available online:

http://osfm.fire.ca.gov/informationbulletin/pdf/2017/IB_AESCert_final_05_25_17.pdf



Quiz: Test your knowledge.

OSFM Certification requirement applies to all UC Facilities and properties administered or occupied by the University of California?

A. True

B. False



Quiz: Test your knowledge.

OSFM Certification requirement applies to all UC Facilities and properties administered or occupied by the University of California?

A. True

B. False

OSFM Information Bulletin 17-002 applies to all UC Facilities located in the State of California. This regulation applies to all water protection systems work throughout California.

It does not apply to UC Facilities located outside of California and outside of USA borders.

Quiz: Test your knowledge.

UC Facilities staff who work on the installation, alteration or repair of all water-based fire protection systems are required to have a C-16 license.

- A. True
- B. False



Quiz: Test your knowledge.

UC Facilities staff who work on the installation, alteration or repair of all water-based fire protection systems are required to have a C-16 license.

A. True

B. False

OSFM certification is required to work on water protection systems.
A C-16 license is not required.

SPRINKLER FITTERS CERTIFICATION

Informational Bulletin 17-002

- Overview of AES certification timeline?
- How often AES certifications are renewed.
- Learn about the two types AES certifications.
- Where to find a list of OSFM AES certified individuals.





AB-433 Contractors: fire protection systems: fire safety: State Fire Marshal. (2013-2014)

Assembly Bill No. 433

CHAPTER 377

An act to amend Sections 7026.12 and 7057 of, and to add and repeal Section 7026.13 of, the Business and Professions Code, and to add Section 13110 to the Health and Safety Code, relating to contractors.

[Approved by Governor September 27, 2013. Filed with Secretary of State September 27, 2013.]

LEGISLATIVE COUNSEL'S DIGEST

AB 433, Gordon. Contractors: fire protection systems: fire safety: State Fire Marshal.

The Contractors' State License Law provides for the licensure and regulation of contractors by the Contractors' State License Board within the Department of Consumer Affairs. Existing law provides that the installation of a fire protection system may be performed only by a contractor holding a fire protection contractor classification, or by an owner-builder of an owner-occupied, single-family dwelling, as specified.

This bill would additionally authorize, until January 1, 2017, the installation of a residential fire protection system for a one- or 2-family dwelling by a contractor holding a fire protection contractor classification or a plumbing contractor classification, as defined in the regulations of the board. The bill would also state the intent of the Legislature with respect to these matters.

Existing law requires the Office of the State Fire Marshal to be administered by the State Fire Marshal. Existing law authorizes the State Fire Marshal to adopt regulations in specified circumstances and requires the State Fire Marshal to aid in the enforcement of building standards adopted by the State Fire Marshal and published in the State Building Standards Code relating to fires or to fire prevention and protection.

This bill would authorize the State Fire Marshal to propose, adopt, and administer the regulations that he or she deems necessary in order to ensure fire safety in buildings and structures and would require regulations that are building standards to be submitted to the State Building Standards Commission for approval. The bill would authorize the State Fire Marshal to establish and collect reasonable fees to implement these provisions.

- **AB 433**
September 27, 2013
- **Legislature**
tasked OSFM to adopt
regulations to ensure
fire safety in building
and structures.
- **OSFM**
Issued
Bulletin 17-002
May 25, 2017



SPRINKLER FITTER'S CERTIFICATION

TIMELINE



2017

July 1, 2017

Regulations are effective.
No certification card required until July 1, 2018.

2018

December 31, 2017

Deadline to become certified without taking an exam.

July 1, 2018

At least one certified sprinkler fitter on each job site.

2019

January 1, 2019

All fitters on job site certified.
All trainees and apprentices on job site registered.

SPRINKLER FITTER'S CERTIFICATION





CAL FIRE – Office of the State Fire Marshal Information Bulletin 18-014

Issued: December 28, 2018

2019 FIRE SPRINKLER FITTER CERTIFICATION

As part of the implementation of the new Fire Sprinkler Fitter Certification Program, effective January 1, 2019 any person who installs, alters, or repairs water-based fire protection systems in a multi-family or commercial building is required to possess a certification card from CAL FIRE-Office of the State Fire Marshal (OSFM). All Apprentices and Trainees shall possess a registration card as shown below.

Sample Certification Card

	AUTOMATIC EXTINGUISHING SYSTEMS			Type: Sprinkler Fitter	Expires: June 30th
	A5477			License Number: A5477	
	BEAR, SMOKEY			SAMPLE	
	D.O.B. 08/09/1944			This card issued by CAL FIRE Office of the State Fire Marshal is for identification purposes only and shall not be used for advertising. State Fire Marshal recommendation is NOT given or implied.	
Eyes: BROWN	Weight: 400				
Hair: BROWN	Height: 8' 2"				
The bearer, whose photo and signature appears hereon is authorized to perform as a Sprinkler Fitter within the limits set forth on the reverse.				IF FOUND, RETURN TO: CAL FIRE Office of the State Fire Marshal Attn: Fire Engineering/AES 2251 Harvard Street, Suite 400 Sacramento, CA, 95815	

Sample Sprinkler Fitter card.

Sample back of card.

SPRINKLER FITTER'S CERTIFICATION

Additionally, the back of the certification card will have a reflective sticker indicating the year and certification type. The 2018-2019 Multi-Family Residential Certification card holder will receive a white sticker and the 2018-2019 Commercial Certification and Apprentices/Trainee card holders will receive a yellow sticker.

Sample Certification Stickers



Sample Commercial Sticker



Sample Multi-Family Residential Sticker

Over 5,000 Fire Sprinkler Fitter Certification and registration cards have been issued. In addition, some fitters have been issued a letter from the OSFM acting as a temporary certificate. These temporary letters are issued in lieu of cards, and can be verified at any time by contacting the OSFM.

Enforcement

In California Code of Regulations Title 19, Chapter 5.5, Article 4 details the enforcement of the Fire Sprinkler Fitter Certification Program. The State Fire Marshal, their designee, and the Authority Having Jurisdiction (AHJ) are authorized to inspect project worksites where work on fire protection systems is being performed to ensure that persons performing the work possess valid certifications or registrations as required by this Chapter. All workers are required to provide proof of applicable certification or registration card. Sections 928 through 933 lay out the penalties and corrective actions for violating these regulations.

SPRINKLER FITTERS CERTIFICATION

OSFM website: osfm.fire.ca.gov

Listings:

Disciplinary Action:

- State Fire Marshal:
 - EN 17 Complaint Form
- Contractors State License Board:
 - Contractor State Licensing Board Complaint Form
 - Complaint Form for Public Use
- Listings:**
 - AES Listings
- Recalls:
 - Fire Hazard Recalls

CA.gov | Contact Us | Site Map | Translate

CA CAL FIRE OFFICE OF THE STATE FIRE MARSHAL

CAL FIRE HOME ABOUT US DIVISIONS BOARDS & COMMITTEES

Automatic Extinguishing System

Automatic Extinguishing System

The CAL FIRE – Office of the State Fire Marshal’s (CAL FIRE – OSFM) Automatic Extinguishing Systems (AES) Program’s mission is to protect Californians and their property from the adverse effects of fire by ensuring those who install, test, maintain, and/or service automatic fire extinguishing systems possess the necessary skills and qualifications to safely and properly do so.

All automatic fire extinguishing systems installed in California must meet California Building & Fire Code standards, manufacturing and performance standards, and bear the label of an approved testing laboratory. Additionally, all testing, maintenance, and servicing on automatic fire extinguishing systems must be performed by those licensed by the CAL FIRE – OSFM or the California Contractor’s State License Board.

Health and Safety Code section 13195.5 requires: “Every automatic fire extinguishing system, including, but not limited to, fire sprinkler systems, engineered and pre-engineered fixed extinguishing systems, standpipe systems, and alarm and supervisory equipment attached to those systems shall be serviced, tested, and maintained in accordance with the regulations and building standards adopted by the State Fire Marshal pursuant to Section 13195.”

Fire licensing by the CAL FIRE – OSFM for automatic fire extinguishing systems maintenance in California ensures that all standards are met for these life-saving devices. Applicants are granted CAL FIRE – OSFM licenses if they meet certain work experience and/or training requirements as outlined in the regulations.

Contact Us:

- Automatic Extinguishing Program at AES@fire.ca.gov

Fire Pump Exam Update

On February 1, 2016, a new Fire Pump Examination went into effective. This test has been updated to reflect the recently amended and adopted National Fire Protection Association (NFPA) Standard 25. [Click here](#)

AES Fire Sprinkler Fitter Certification:

The Fire Sprinkler Fitter Certification regulations are effective July 1, 2017. The program aims to improve the quality of water-based fire extinguishing systems by providing a means to certify and register persons who install, modify or add accessories to such systems. This ensures quality installation and maintenance of water-based fire extinguishing systems in California. [Click here](#) for more information.

License/Certification/Registration Applications:

- Application For Weekly Fire Pump Test Certificate
- Automatic Extinguishing Systems Limited License (Updated 05-14-20)
- Automatic Extinguishing Systems Company License Application (Updated 04-21-2011)
- Exam Policy
- Sprinkler Fitter Certification Application
- Sprinkler Fitter Apprentice/Trainee Registration Application
- Sprinkler Fitter Recurrent Certification/Registration ID Card Application
- Continuing Education Course Application

Publications/Printouts:

- Automatic Fire Extinguishing Systems Laws and Regulations; (updated 05/01/2017)
- Frequently Asked Questions Handbook for UL 300 Systems; (updated 07/02/2009)
- Sprinkler Fitter Certification Flowchart
- Sprinkler Fitter Information Bulletin
- Sprinkler Fitter Powerpoint Presentation
- Where to get NFPA 25 - 2013 California Edition
- Sprinkler Fitter Frequently Asked Questions

AES Forms, Labels, and Tags

Divisions Links:

- California All Incident Reporting System (CAIRS)
- Code Development and Analysis
- Fire and Life Safety
- Fire and Resource Assessment Program (FRAP)
- Fire Engineering Division
- Fire Plan
- Pipeline Safety Division
- State Fire Training
- Wildland Fire Prevention Engineering

Related Program Sites

- Building Materials Listing
- Fire Extinguisher Program
- Flame Retardant Chemicals and Fabrics
- Vapor Recovery Program
- Automatic Fire Extinguishing Systems
- Fire Safe Cigarette Program
- Lab Accreditation
- Fireworks
- Motion Picture and Entertainment

Disciplinary Action:

- State Fire Marshal:
 - EN 17 Complaint Form
- Contractors State License Board:**
 - Contractor State Licensing Board Complaint Form
 - Complaint Form for Public Use
- Listings:
 - AES Listings
- Recalls:
 - Fire Hazard Recalls

Related Links

- California Natural Resources Agency
- California Firefighters Joint Apprenticeship Committee
- Contractors State License Board
- Board of Equalization
- Attorney General’s Office

<http://osfm.fire.ca.gov/licensinglistings/pdf/aes/AESlisting.pdf>

Quiz: Test your knowledge.

I submitted my application to OSFM for Certification in the Fall 2018 and was told there is a backlog to process applications. While OSFM processes my application I am able to perform work on water protection systems.

- A. True
- B. False



Quiz: Test your knowledge.

I submitted my application to OSFM for Certification in the Fall 2018 and was told there is a backlog to process applications. While OSFM processes my application I am able to perform work on water protection systems.

A. True

B. False

You are not permitted to work on water protection systems until OSFM issues a certification card or a letter similar to what the DMV issues for temporary driver licenses.

SPRINKLER FITTERS CERTIFICATION

Informational Bulletin 17-002

- How does the OSFM Bulletin 17-002 apply to UC construction contracting?
 - Bidding
 - Specifications
 - Blanket Contracts for Fire Protection Systems



UC CONTRACTS

- **No change to core contract documents**

Project Name: { }

Project No.: { }

1.0 BIDDER'S REPRESENTATIONS

Bidder, represents that a) Bidder and all Subcontractors, regardless of tier, has the appropriate current and active Contractor's licenses required by the State of California and the Bidding Documents; b) it has carefully read and examined the Bidding Documents for the proposed Work including all Information Available to Bidders on this Project; c) if required by the Bidding Documents, it has examined the site of the proposed Work; d) it has become familiar with all the conditions related to the proposed Work, including the availability of labor, materials, and equipment; e) Bidder and all Subcontractors, regardless of tier, are currently registered with the California Department of Industrial Relations pursuant to California Labor Code Section 1725.5 and 1771.1. Bidder hereby offers to furnish all labor, materials, equipment, tools, transportation, and services necessary to complete the proposed Work on this Project in accordance with the Contract Documents for the sums quoted. Bidder further agrees that it will not withdraw its Bid within {60} days after the Bid Deadline, and that, if it is selected as the apparent lowest responsive and responsible Bidder, that it will, within 10 days after receipt of notice of selection, sign and deliver to University the Agreement in triplicate and furnish to University all items required by the Bidding Documents. If awarded the Contract, Bidder agrees to complete the proposed Work within {NUMBER} days after the date of commencement specified in the Notice to Proceed.



UC CONTRACTS

- **No change to sub-contractor listing**

9.0 LIST OF SUBCONTRACTORS

Bidder will use Subcontractors for the Work:

Yes _____

If “yes”, provide in the spaces below (a) the name, the location of the place of business, and the California contractor license number of each subcontractor who will perform work or labor or render service to the prime contractor in or about the construction of the work or improvement, or a subcontractor licensed by the state of California who, under subcontract to the prime contractor, specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the plans and specifications, in an amount in excess of one-half of 1 percent of the prime contractor's total bid, (b) the portion of the work which will be done by each subcontractor. The prime contractor shall list only one subcontractor for each such portion as is defined by the prime contractor in its bid.

Portion of the Work Activity (e.g. electrical, mechanical, concrete)	Subcontractor			
	Name of Business	Location of Business (City)	License No.	DIR Registration No.



1 GENERAL:

1.1 DESCRIPTION:

- A. This Section specifies materials, methods, and equipment to be used for automatic sprinkler system, standpipe system, fire pump system and related fire protection piping to 5 ft outside building.
- B. As shown on drawings, system(s) shall consist of:
- C. Each wet pipe zone shall begin with:
 - 1. Zone control valve with tamper switch.
 - 2. Check Valve (Combined standpipes).
 - 3. Flow switch.
 - 4. Inspectors test and drain valve.
 - 5. Pressure gauge.
- D. This Section specifies design criteria for fire protection system. Zone and main piping layouts of fire protection system have been established, as it relates to architecture, structure and mechanical/electrical systems. Fire Protection Contractor, based on these layouts, shall produce installation drawings which are also referred to as shop drawings in this Specification.

1.2 RELATED WORK:

- A. Section 20 0513 – Motors
- B. Section 20 0520 - Excavation and Backfill
- C. Section 20 0549 - Seismic Anchorage and Restraints
- D. Section 20 0553 - Mechanical Systems Identification
- E. Section 28 3116 - Multiplexed Fire Detection and Alarm Systems

1.3 QUALITY ASSURANCE:

- A. Codes and Standards:
 - 1. NFPA 13, Installation of Sprinkler Systems
 - 2. NFPA 20, Installation of Stationary Pumps for Fire Protection
 - 3. NFPA 30, Flammable and Combustible Liquids Code
 - 4. NFPA 45, Fire Protection for Laboratories Using Chemicals
 - 5. NFPA 72, National Fire Alarm Code
 - 6. Underwriters Laboratories (UL) Fire Protection Equipment Directory
 - 7. California Building Code – Latest Version
 - 8. City of Los Angeles Fire Code – Latest Version
 - 9. California Fire Code – Latest Version
 - 10. Title 19 of California Code of Regulations
 - 11. University of Southern California Design Standards

UC CONTRACTS

- Specifications

- CSI Format

- Section 21 13 14

Automatic Fire Sprinkler System



UC CONTRACTS

- Specifications

- C-16 – include and shall be OSFM Certified

- B. Contractor Installation Program:

1. Licensed persons employed by Sprinkler Contractor shall perform planning, calculations, layout, and installation. Certified sprinkler designer, National Institute for Certification of Engineering Technologies, (NICET) Level IV or licensed Professional Engineer for planning and calculations, and journeyman sprinkler fitters for installation foreman and supervisory personnel.
2. Journeyman automatic fire sprinkler fitter(s) shall supervise field installation.
3. Contractor shall be licensed in the State of California for Installation of Fire Protection Systems **and shall be OSFM Certified.**
4. Contractor shall submit pre-qualification evidence of at least 3 projects of comparable size successfully completed with their Bid.
5. Distortion or misrepresentation of qualification evidence may result in Contract cessation.



UC CONTRACTS

- **Blanket Contracts for Fire Protection Systems**
 - **C-16**
 - **. . . . and all pipe fitters shall be OSFM Certified**
 - **. . . . and all trainees and apprentices on job site registered.**



Quiz: Test your knowledge.

This new regulation requires one certified sprinkler fitter on each job site.

A. True

B. False



Quiz: Test your knowledge.

This new regulation requires one certified sprinkler fitter on each job site.

A. True

B. False

The regulation requires all fitters on each job site to be certified.

CONFUSED ABOUT THE REGULATION?

- Contact your Designated Campus Fire Marshal

2019 UC Designated Fire Marshals

❑ **University of California, Berkeley**
Amy W. Chen, Lead DCFM

❑ **University of California, Riverside**
Scott Leland Jackson, Lead DCFM

❑ **University of California, Davis**
James Patterson, Interim Lead DCFM

❑ **University of California, San Diego**
Chuck Strickland, Lead DCFM

❑ **University of California, Davis Health**
Michael Major, Lead DCFM, FSLO II OSHPD

❑ **University of California, San Diego Medical Center**
Jimmy Fiero, DCFM (Non-OSHPD)

❑ **University of California, Irvine**
Dale Saunders MPA AIA, Lead DCFM

❑ **University of California, San Francisco**
Jeff Monkman, Interim Lead DCFM

❑ **University of California, Irvine Medical Center**
David Adrian, DCFM T19 (Non-OSHPD)

❑ **University of California, Santa Barbara**
Jim White, DCFM

❑ **University of California, Los Angeles & Medical Center**
Dana C. Johnson, Lead DCFM

❑ **University of California, Santa Cruz**
Nick Otis, Lead DCFM

❑ **University of California, Merced**
Gini Krippner, Lead DCFM

❑ **Lawrence Berkeley National Laboratory**
Todd LaBerge, P.E., Lead DCFM



CONFUSED ABOUT THE REGULATION?

- Call UCOP
- Call your construction counsel at OGC

