

**CALIFORNIA DEPARTMENT of FORESTRY
and FIRE PROTECTION
OFFICE OF THE STATE FIRE MARSHAL**

UL 300

**FREQUENTLY ASKED QUESTIONS
CONCERNING
COMMERCIAL COOKING
PROTECTION**

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Preface:

This document addresses the frequently asked questions concerning the installation, inspection, testing and maintenance of commercial cooking fire suppression systems as addressed in California Fire Code (CFC) §904 Alternative Automatic Fire-Extinguishing Systems and the California Mechanical Code (CMC) §513 Fire-Extinguishing Equipment.

Also an Information Bulletin explaining the implementation of CFC §904.11 may be found on the State Fire Marshals' website:

<http://osfm.fire.ca.gov/informationbulletin/pdf/2007/020707ProtOfRestaurantCooking20Areas.pdf>

The Office of the State Fire Marshal amended CFC §904.11 to clarify the application of Underwriters Laboratories Standard 300 (UL 300). These regulations became effective January 1, 2008.

All automatic fire extinguishing systems used for the protection of commercial cooking operations that produce grease laden vapors shall comply with UL 300. All existing dry and wet chemical fire extinguishing systems installed for the protection of those operations shall comply with the UL 300 Standard no later than the second required servicing of the system after January 1, 2008.

Question: Where can I find the regulations that require the installation of automatic fire-extinguishing systems to protect commercial cooking equipment that produces grease laden vapor?

Answer: CFC §904.11 and the CMC §513.2.2

Question: Where can I find the law that requires automatic fire-extinguishing systems installed to protect commercial cooking equipment to be Inspected, Tested and Maintained?

Answer: For the law (statute) see Health and Safety Code (H&S) §13195. You can view the law by visiting: <http://leginfo.ca.gov/> and clicking on "California Law", then click on Health and Safety Code and type in the §13195.

Question: When did the retroactive requirement for automatic fire-extinguishing systems that protect commercial cooking equipment which produces grease laden vapor meet the UL 300 Standard?

Answer: The CFC §904.11 and CMC §513.2.2 became effective January 1, 2008.

Question: Can a company holding a State Fire Marshal "A" License **Install** a fire protection system?

Answer: No . Pursuant to the Business and Professions Code §7026.12, only a Contractors State Licensing Board Licensed C-16 Contractor shall install a fire protection system.

Business and Professions Code §7026.12. The installation of a fire protection system, excluding an electrical alarm system, shall be performed only by a contractor holding a fire protection contractor classification as defined in the regulations of the board or by an owner-builder of an owner-occupied, single-family dwelling, if not more than two single-family dwellings on the same parcel are constructed within one year, plans are submitted to and approved by the city, county, or city and county authority, and the city, county, or city and county authority inspects and approves the installation.

Question: I have one quote for \$1200 and another for \$4500. Both quotes claim their work will bring my hood fire extinguishing system up to code. What steps should I take to ensure the work complies with UL 300?

Answer: Try to obtain at least 3 proposals from contractors properly licensed by the Contractor State Licensing Board (CSLB) as a C-16 to perform the work. Make sure that they include permit fees, plans submittal and an acceptance test witnessed by the Authority Having Jurisdiction.

Question: My vendor advises me that I currently have a dry chemical system that cannot be certified. What course of action should I take?

Answer: You should work with your local fire department to ensure that the information your vendor provided is accurate. Try to obtain at least 3 proposals from contractors properly licensed by the Contractor State Licensing Board (CSLB) as a C-16 contractor to perform the work. Make sure that the proposal includes permit fees, plans submittal and an acceptance test witnessed by the Authority Having Jurisdiction. Please remember that dry chemical systems cannot be upgraded. The entire system must be replaced.

Question: How long do I have to accomplish this work?

Answer: The work should have been completed by December 31, 2008. While the code is very clear regarding this requirement, local authorities have the regulatory authority to evaluate your situation and apply the CFC as they deem necessary. For further information, please see our bulletin at: <http://osfm.fire.ca.gov/informationbulletin/pdf/2008/ul300compliancedeadline.pdf>

Question: A school district is using their kitchens in the elementary schools to “warm” food only. This is done with existing ovens. The only appliances are range tops and ovens. Do they have to remove and replace the existing hood fire suppression system?

Answer: Public schools kitchens, without deep-fat fryers, shall be upgraded to a UL 300 compliant system during state funded modernization projects that are under the jurisdiction of the Division of the State Architect (DSA). For further information, please see our bulletin at: <http://osfm.fire.ca.gov/informationbulletin/pdf/2007/020707ProtofRestaurantCooking20Areas.pdf>

Question: What regulation requires upgrade to a UL 300 Fire Suppression System?

Answer: The CFC §904.11.

904.11 Commercial cooking systems. *Commercial cooking equipment that produce grease laden vapors shall be provided with a Type I hood, in accordance with the CMC, and an automatic fire-extinguishing system that is listed and labeled for its intended use as follows:*

- 1. Wet-chemical extinguishing system, complying with UL 300.*
- 2. Carbon dioxide extinguishing systems.*
- 3. Automatic fire sprinkler systems.*

All existing dry-chemical and wet-chemical extinguishing systems shall comply with UL 300 no later than the second required servicing of the system following the effective date of this section.

CMC § 513.2.2

513.2.2 Commercial cooking systems. *Commercial cooking equipment that produces grease laden vapors shall be provided with a Type I hood, in accordance with the CMC,*

and an automatic fire-extinguishing system that is listed and labeled for its intended use as follows:

- 1. Wet-chemical extinguishing system (NFPA 17A, Standard for Wet Chemical Extinguishing Systems), complying with UL 300),*
- 2. Carbon dioxide extinguishing systems (NFPA 12, Standard on Carbon Dioxide Extinguishing Systems),*
- 3. Automatic fire sprinkler systems (NFPA 13, Standard for the Installation of Sprinkler Systems).*

All existing dry-chemical and wet-chemical extinguishing systems shall comply with UL 300, no later than the second required servicing of the system following the effective date of this section.

Question: How and when was the fire service community and the public notified?

Answer: Throughout the adoption process the fire service community was updated through the NorCal and SoCal Fire Prevention Officer meetings and through the public notice process of the Building standards Commission. The Office of the State Fire Marshal posted the Automatic Extinguishing System Advisory Committee meeting minutes and proposed regulation on our website.

The Insurance Industry, California Restaurant Association, California Hotel Motel Association, three Public School Associations, the Fire Protection Industry and the Fire Service all were represented during the regulation development process.

Question: Are Fire Suppression System Tags required to be submitted to the Office of the State Fire Marshal for approval?

Answer: Yes, all tags shall be submitted to the Office of the State Fire Marshal for approval in accordance with California Code of Regulations, Title 19 §906, which states:

General

(a) Labels shall be used on water-based fire protection systems.

(b) Tags shall be used on engineered and pre-engineered fixed extinguishing systems.

(c) Labels and tags shall be white with black letters. They shall be five and one-fourth inches (5-1/4") in length, and two and five-eighth inches (2-5/8") in width with a one-fourth inch (1/4") tolerance for each dimension. One sample label and/or tag shall be submitted to the Office of the State Fire Marshal for approval.

Question: Are local fire departments required to maintain a file of the testing documents that are sent to them?

Answer: No. It is not the intent of the Office of the State Fire Marshal to mandate the retention of automatic extinguishing system maintenance records. It is the responsibility of the contractor, company, or licensee to provide a written report of the test and maintenance results to the building owner and the local fire authority having jurisdiction at the completion of the testing and maintenance. It is the responsibility of the building owner to retain the records.

NFPA 17A § 7.2.6 The records shall be retained for the period between the semiannual maintenance inspections.

CFC §904.11.6.4 Extinguishing system service. *Automatic fire-extinguishing systems shall be serviced at least every 6 months and after activation of the system. Inspection shall be by qualified individuals, and a certificate of inspection shall be forwarded to the fire code official upon completion.*

Question: Do fire suppression systems on "taco" trucks or other food vehicles need to be upgraded to a UL300 system?

Answer: Yes. The Health and Safety Code §113789 defines "Food Facility" which includes Mobile food facilities. Health and Safety Code §114149.1 (a) states:

Mechanical exhaust ventilation equipment shall be provided over all cooking equipment as required to effectively remove cooking odors, smoke, steam, grease heat, and vapors. All mechanical exhaust ventilation equipment shall be installed and maintained in accordance with the California Mechanical Code, except that for units subject to Part 2 (commencing with Section 18000) of Division 13, an alternative code adopted pursuant to Section 18028 shall govern the construction standards.

The California Mechanical Code §513.2.2 requires the upgrade to UL 300.

Question: Is there a comprehensive document that explains what restaurants are required to do to comply with UL 300 requirements?

Answer: No. The CFC §904.11 and the CMC §513.2.2 require the change. The National Fire Protection Association (NFPA) Standard 17A as adopted in the CFC is the guideline for installation.

Question: Does the electrical power supply under the hood need to be switched off when the fire suppression system is activated?

Answer: Yes, see 2007 CFC §904.11.2

904.11.2 System interconnection. *The actuation of the fire extinguishing system shall automatically shut down the fuel or electrical power supply to the cooking equipment. The fuel and electrical supply reset shall be manual.*

Question: Is a gas shut off valve that controls the cook appliances required to activate when the fire suppression system activated?

Answer: Yes. Please see the 2007 CFC §904.11.2

904.11.2 System interconnection. *The actuation of the fire extinguishing system shall automatically shut down the fuel or electrical power supply to the cooking equipment. The fuel and electrical supply reset shall be manual.*

Question: A fire suppression system can only be installed by a contractor with a C-16 license. Are they also required to be certified by the manufacturer of the systems they install?

Answer: No. For the installation requirements please refer to the California Business and Profession Code §7026.12. However, CFC §901.2 and NFPA 17A allow the AHJ to require factory certification.

B & P 7026.12 The installation of a fire protection system, excluding an electrical alarm system, shall be performed only by a contractor holding a fire protection contractor classification as defined in the regulations of the board or by an owner-builder of an owner-occupied, single-family dwelling, if not more than two single-family dwellings on the same parcel are constructed within one year, plans are submitted to and approved by the city, county, or city and county authority, and the city, county, or city and county authority inspects and approves the installation.

CFC 901.2 Construction documents. *The fire code official shall have the authority to require construction documents and calculations for all fire protection systems and to require permits be issued for the installation, rehabilitation or modification of any fire protection system. Construction documents for fire protection systems shall be submitted for review and approval prior to system installation.*

NFPA 17A § 6.2* Review and Certification. *Design and installation of systems shall be performed only by persons properly trained and qualified to design and/or install the specific system being provided. The installer shall provide certification to the authority having jurisdiction that the installation is in complete agreement with the terms of the listing and the manufacturer's instruction and/or approved design.*

NFPA 17A § A.6.2 *It is recommended that system design and installation personnel be certified in accordance with the manufacturer's requirements. It is standard industry practice to provide expiration dates on training certificates.*

Question: Does CFC §904.11 require an upgrade to existing non-compliant hoods when a UL 300 system is being installed?

Answer: No. It is not the intent of the CFC §904.11 to require the replacement of a hood that was installed according to the applicable standard, inspected and approved by the AHJ at the time of installation.

Question: Is the owner required to make appropriate changes to the existing hood to meet the current requirements for a Type 1 hood?

Answer: No. It is not the intent of the CFC §904.11 to require the replacement of a hood that was installed according to the applicable standard, inspected and approved by the AHJ at the time of installation.

Question: Who makes the determination that a hood upgrade is necessary?

Answer: The Authority Having Jurisdiction.

Question: Would the determination to require an upgrade to a hood be made during the plan review process.

Answer: No. This would require a field inspection.

***CFC 901.2.1 Statement of compliance.** Before requesting final approval of the installation, where required by the fire code official, the installing contractor shall furnish a written statement to the fire code official that the subject fire protection system has been installed in accordance with approved plans and has been tested in accordance with the manufacturer's specifications and the appropriate installation standard. Any deviations from the design standards shall be noted and copies of the approvals for such deviations shall be attached to the written statement*

Question: Where can I find the requirements for cleaning the hood system?

Answer: The CFC §904.11.6.3, the CMC §514.3

***CFC 904.11.6.3 Cleaning.** Hoods, grease-removal devices, fans, ducts and other appurtenances shall be cleaned at intervals necessary to prevent the accumulation of grease. Cleanings shall be recorded, and records shall state the extent, time and date of cleaning. Such records shall be maintained on the premises.*

CMC 514.3 Cleaning.

514.3.1 Hoods, grease removal devices, fans, ducts, and other appurtenances shall be cleaned to bare metal or the original factory coating at frequent intervals prior to surfaces becoming heavily contaminated with grease or oily sludge. After the exhaust system is cleaned, it shall not be coated with powder or other substance. The entire exhaust system shall be inspected by a properly trained, qualified, and certified company or person(s) in accordance with Table 5-4.

514.3.1.1 Upon inspection, if found to be contaminated with deposits from grease-laden vapors, the contaminated portions of the exhaust system shall be cleaned by a properly trained, qualified, and certified company or person(s) acceptable to the Authority Having Jurisdiction in accordance with §514.3. [NFPA 96 11.4.1]

Question: Does the Gaylord water wash system meet the UL300 Standard?

Answer: No. A Gaylord water wash hood does not comply with the UL 300 Standard for plenum and duct protection.

Question: If a Gaylord water wash system is being upgraded to meet the UL300 Standard, is it required to install nozzles in the plenum and duct?

Answer: Yes. A UL 300 compliant plenum and duct system must be installed in the water wash hood. This does not require the installer be a Gaylord CSA.

However, when the contractor cuts access into the hood, which they will need to do, they must use an access panel listed for use in a grease duct.

For more information, please access: info@gaylordusa.com