

FIRE DEPARTMENT / PREVENTION

Fire Station 2 -170 N. Wilbur Ave. Walla Walla, WA 99362-2548 Telephone (509) 524-4603 FAX (509) 524-7947

April 2, 2021

RE: Fire Extinguishing Systems Plans and Specifications

Dear Owner and/or Contractor:

The Walla Walla Fire Department (WWFD) would like to make you aware of some requirements for all new installations, existing system upgrades and modifications of required and non-required life safety systems.

DESIGN

2018 IFC Section 904.2 Where Automatic fire-extinguishing systems are installed as an alternative to the required automatic sprinkler systems of Section 903 shall be approved by the fire code official. Automatic fire-extinguishing systems shall not be considered alternatives for the purposes of exceptions or reductions allowed by other requirements of this code.

2018 IFC 904.3.1 Electrical. Electrical wiring shall be in accordance with NFPA 70.

2018 IFC 904.3.2 Actuation. Automatic fire-extinguishing systems shall be automatically actuated and provided with a manual means of actuation in accordance with Section 904.12.1.

2018 IFC 904.3.3 System interlocking. Automatic equipment interlocks with fuel shutoffs, ventilation controls, door closers, window shutters, conveyor openings, smoke and heat vents, and other features necessary for proper operation of the fire-extinguishing system shall be provided as required by the design and installation standard utilized for the hazard.

2018 IFC 904.3.4 Alarms and warning signs. Where alarms are required to indicate the operation of automatic fire-extinguishing systems, distinctive audible, visible alarms and warning signs shall be provided to warn of pending agent discharge. Where exposure to automatic-extinguishing agents poses a hazard to persons and a delay is required to ensure the evacuation of occupants before agent discharge, a separate warning signal shall be provided to alert occupants once agent discharge has begun. Audible signals shall be in accordance with Section 907.5.

2018 IFC 904.3.5 Monitoring. Where a building fire alarm system is installed, automatic fire-extinguishing systems shall be monitored by the building fire alarm system in accordance with NFPA 72.

2018 IFC 904.5 Wet-chemical systems.

Wet-chemical extinguishing systems shall be installed, maintained, and periodically inspected and tested in accordance with NFPA 17A and their listing. Records of inspections and testing shall be maintained.

2018 IFC 904.6 Dry-chemical systems.

Dry-chemical extinguishing systems shall be installed, maintained, and periodically inspected and tested in accordance with NFPA 17 and their listing. Records of inspections and testing shall be maintained.

2018 IFC 904.7 Foam systems.

Foam-extinguishing systems shall be installed, maintained, and periodically inspected and tested in accordance with NFPA 11 and NFPA 16 and their listing. Records of inspections and testing shall be maintained.

2018 IFC 904.8 Carbon-dioxide systems

Carbon dioxide extinguishing systems shall be install, maintained, and periodically tested in accordance with NFPA 12 and their listing. Records of inspections and testing shall be maintained.

2018 IFC 904.9 Halon systems.

Halogenated extinguishing systems shall be installed, maintained, and periodically inspected and tested in accordance with NFPA 12A and their listing. Records of inspections and testing shall be maintained.

2018 IFC 904.10 Clean-agent systems.

Clean-agent fire-extinguishing systems shall be installed, maintained, and periodically inspected and tested in accordance with NFPA 2001 and their listing. Records of inspections and testing shall be maintained.

2018 IFC Chapter 6 Section 607.2

A Type I hood shall be installed above all commercial and domestic cooking appliances used for commercial purposes that produce grease-laden vapors.

2018 IFC 904.12 Commercial cooking systems. The automatic fire-extinguishing system for commercial cooking systems shall be of a type recognized for protection of commercial cooking equipment and exhaust systems of the type and arrangement protected. Reengineered automatic dry- and wet-chemical extinguishing systems shall be tested in accordance with UL300 and listed and labeled for the intended application. Other types of automatic fire-extinguishing systems shall be listed and labeled for specific use as protection for commercial cooking operations. The system shall be installed in accordance with this code, its listing and the manufacturer's installation instructions. Automatic fire-extinguishing systems of the following types shall be installed in accordance with the referenced standard indicated, as follows:

- 1. Carbon dioxide extinguishing systems, NFPA 12.
- 2. Automatic sprinkler systems, NFPA 13.
- 3. Foam-water sprinkler system or foam-water spray systems, NFPA 16.
- 4. Dry-chemical extinguishing systems, NFPA 17.
- 5. Wet-chemical extinguishing system, NFPA 17A.

2018 IFC 904.12.1 Manual system operation. A manual actuation device shall be located at or near a means of egress from the cooking area; a minimum of 10 feet and a maximum of 20 feet from the kitchen exhaust system. The manual actuation device shall be located a minimum of 4 feet and a maximum of 5 feet above the floor. The manual actuation shall require a maximum force of 40 pounds and a maximum movement of 14 inches to actuate the fire suppression system.

Exception: Automatic sprinkler systems shall not be required to be equipped with manual actuation means.

2018 IFC 906.4.2 Portable fire extinguishers. Portable fire extinguishers shall be provided within a 30-foot travel distance of commercial-type cooking equipment. Cooking equipment involving vegetable or animal oils and fats shall be protected by a Class K rated portable extinguisher.

All plans are subject to field inspection for final acceptance.

SUBMITTAL REQUIREMENTS

2018 IFC 105.4.4 Approved documents. Construction documents approved by the fire code official are approved with the intent that such construction documents comply in all respects with this code. Review and approval by the fire code official shall not relieve the applicant of the responsibility of compliance with this code.

Fire Protection Permit. Per City Ordinance No. 2003-43 Subsection 15.04.010(H) a permit is required for the installation, alteration, or repair of fire protection and/or fire detection equipment. All applications and fees will be processed through the City of Walla Walla Development Services. The Walla Walla Fire Department will issue a permit once submittal requirements are met, and review process is completed.

At the discretion of the Walla Walla Fire Department, complete or partial plans and specifications for fire extinguishing systems shall be submitted to the City of Walla Walla for review. Deviation from approved plans will require notification.

Preliminary and working plans for install shall include basic room layout showing pull station location in relation to hood and exit, type of cooking appliances and their locations under hood, type of nozzles and their locations, and flow point calculations.

One copy of shop drawings & component spec must be submitted electronically in PDF format. Plans should be one file and Spec should be another.

Electronic formatted submittals may be delivered on CD or E-mailed to permits@wallawallawa.gov

Application, Plans and Fees must be received at:

Walla Walla Development Services 55 E Moore Street Walla Walla, WA 99362 (509) 524-4710 permits@wallawallawa.gov

- Subject line on the Email should indicate property address and that it is a "Fire Extinguishing System Application" (170 N Wilbur / Fire Extinguishing System Application)
- Application will not be processed until Review Payment is received.
- Payment can be with cash, VISA, or check.
- Once review is complete Permit Fee will be due.

INSTALLATION

Installation shall comply with all applicable 2018 IFC codes and NFPA guidelines. Installation must be conducted by a manufacturer certified technician. No extinguishing agent is aloud in the agent tank until acceptance testing has been completed. Movable cooking equipment shall be provided with a means to ensure that it is correctly positioned in relation to the appliance discharge nozzle during cooking operations.

ACCEPTANCE TESTING

Inspection request line: 509-524-4422 or inspect@wallawallawa.gov

2018 IFC Section 901.5 Installation acceptance testing. Requires fire-extinguishing systems and other fire-protection systems and appurtenances thereto shall meet the approval of the Fire Department as to installation and location and shall be subject to such acceptance tests as required by the fire code official. The fire code official shall be notified before any required acceptance testing.

2018 IFC 904.4 Inspection and testing. Automatic fire-extinguishing systems shall be inspected and tested in accordance with the provisions of this section prior to acceptance.

Manufacturer installation manual shall be available for reference and review.

All nozzle labeling will be visually verified. Acceptance testing shall include a full system pneumatic trip to verify seal puncture and mechanical operation. Pneumatic trip will be done without discharge of agent.

The above is an attempt to identify requirements which you may or may not be aware of. Any code references left out of this letter do not negate the requirements of the code.

If you have any questions, please call the Prevention Office at the numbers listed below:

Respectfully,

Tim Thompson, Fire Inspector/ Fire Plans Reviewer Walla Walla Fire Department <u>tthompson@wallawallawa.gov</u> 509-524-4603

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