



STATE OF WASHINGTON  
**STATE BUILDING CODE COUNCIL**

May 2018  
Log No. \_\_\_\_\_

**1. State Building Code to be Amended:**

- |   |   |
|---|---|
| <input type="checkbox"/> International Building Code          | <input type="checkbox"/> International Mechanical Code        |
| <input type="checkbox"/> ICC ANSI A117.1 Accessibility Code   | <input type="checkbox"/> International Fuel Gas Code          |
| <input type="checkbox"/> International Existing Building Code | <input type="checkbox"/> NFPA 54 National Fuel Gas Code       |
| <input type="checkbox"/> International Residential Code       | <input type="checkbox"/> NFPA 58 Liquefied Petroleum Gas Code |
| <input checked="" type="checkbox"/> International Fire Code   | <input type="checkbox"/> Wildland Urban Interface Code        |
| <input type="checkbox"/> Uniform Plumbing Code                |   |

For the Washington State Energy Code, please see specialized [energy code forms](#)

**Section(s):** WAC 51-54A-0904.1.1

**Title:** Certification of Service personnel for fire-extinguishing equipment

**2. Proponent Name (Specific local government, organization or individual):**

**Proponent:** Jamie Knowles – Amerex Corp. Representing FEMA -Fire Equipment Manufacturers Association, NAFED – National Association of Fire Equipment Distributors, and ORFED – Oregon Fire Equipment Distributors.

**Title:** Industry Relations Manager

**Date:** 04/01/2024

**3. Designated Contact Person:**

**Name:** Jamie Knowles

**Title:** Industry Relations Manager

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**E-Mail address:** james.knowles@Amerex-fire.com

**4. Proposed Code Amendment.** Reproduce the section to be amended by underlining all added language, striking through all deleted language. Insert new sections in the appropriate place in the code in order to continue the established numbering system of the code. If more than one section is proposed for amendment or more than one page is needed for reproducing the affected section of the code, additional pages may be attached.

Clearly state if the proposal modifies an existing amendment or if a new amendment is needed. If the proposal modifies an **existing amendment**, show the modifications to the existing amendment by underlining all added language and striking through all deleted language. If a new amendment is needed, show the modifications to the **model code** by underlining all added language and striking through all deleted language.

**Code(s):** International Fire Code - WAC 51-54A      **Section(s):** 0904.1.1

Enforceable code language must be used.

Amend section to read as follows:

#### **WAC 51-54A-0904**

##### **Alternative automatic fire-extinguishing systems.**

##### **904.1.1 (Effective July 1, 2024) Certification of personnel for alternative fire-extinguishing systems.**

Personnel performing system design, installation, maintenance, programming or testing on automatic fire-extinguishing systems, other than automatic sprinkler systems, shall possess the appropriate National Institute for Certification in Engineering Technologies (NICET) Special Hazards Suppression Systems certification.

**EXCEPTION 1:** A current ICC/NAFED certification for Pre-Engineered Kitchen Fire Extinguishing Systems is allowed in lieu of NICET Level II or higher in Special Hazards Suppression Systems for the design, installation, inspection/testing or maintenance on pre-engineered kitchen fire extinguishing systems.

**EXCEPTION 2:** A current ICC/NAFED certification for Pre-Engineered Industrial Fire Extinguishing Systems is allowed in lieu of NICET Level II or higher in Special Hazards Suppression Systems for the design, installation, inspection/testing or maintenance on pre-engineered dry chemical fire extinguishing systems.

##### **5. Briefly explain your proposed amendment, including the purpose, benefits and problems addressed.**

Specifically note any impacts or benefits to business, and specify construction types, industries and services that would be affected. Finally, please note any potential impact on enforcement such as special reporting requirements or additional inspections required.

Effective July 1, 2024, WAC 51-54A-0904.1.1 would require individuals to have certain NICET qualifications to work on pre-engineered dry chemical fire extinguishing systems. Pre-engineered dry chemical fire suppressions systems are designed specifically and tested for specific identified hazards with pre-determined agent flows, nozzle types, piping sizes and distances, elbows, and extinguishing agent amounts and expellant gas. Pre-Engineered systems whether (kitchen or industrial) have specific flows, pipe size, nozzle types, detection, appliance shutoffs, manual actuation devices and protection capabilities engineered and pre-determined by the manufacturer. These systems have then been tested by the manufacturers as well as tested and certified by 3rd party testing agencies such as UL and listed to cover specific hazards. 90-95% of pre-engineered dry chemical systems are those covering paint booths. However, the others include gas station canopy systems and heavy machinery protection such as those found in CAT earthmovers, school buses, mining vehicles and other mobile equipment. Pre-engineered dry chemical fire extinguishing systems require special training and individuals conducting the design layout, and (IMT) of these manufacturer's pre-engineered dry

chemical systems would be appropriately tested for their knowledge and qualifications under the ICC/NAFED certification for Pre-Engineered Industrial Fire Extinguishing Systems. NICET certification is only appropriate for individuals who are engineering a fire protection system from scratch. Fire protection systems that are engineered systems are being calculated for concentration of the suppression agent, usually a gaseous agent and the dilution of the agent in the hazard area being protected. The concentration leakage from the room must be determined as well as the appropriate location and type of detection devices used and connection to the appropriate alarm and notification systems to be used. Thus, we agree that an individual who is designing, installing, or conducting ITM on an engineered system should be tested under NICET. Again, the appropriate test for the qualifications of individuals conducting the design layout, and (IMT) of these manufacturer's pre-engineered dry chemical systems would be the ICC-NAFED exam for Pre-Engineered Industrial Systems.

This amendment would create an exception for ICC/NAFED certified personnel to perform design, installation, inspection/testing or maintenance on Pre-Engineered Dry Chemical Fire Extinguishing Systems, consistent with current exceptions for Pre-Engineered Kitchen Fire Extinguishing Systems. The amendment will enhance public safety by assuring that service personnel have the appropriate skills and knowledge for the tasks being performed.

**6. Specify what criteria this proposal meets.** You may select more than one.

- The amendment is needed to address a critical life/safety need.
- The amendment clarifies the intent or application of the code.
- The amendment is needed to address a specific state policy or statute.
- The amendment is needed for consistency with state or federal regulations.
- The amendment is needed to address a unique character of the state.
- The amendment corrects errors and omissions.

**7. Is there an economic impact:**  Yes  No

If no, state reason: This amendment would result in no economic impact, as ICC/NAFED certification is currently required when performing design, installation, inspection/testing or maintenance on pre-engineered dry chemical fire-extinguishing systems. However, if this amendment is not created, due to the limited number of individuals and companies which have the NICET qualifications, service disruption and demand based upon supply and demand cost for services will increase and businesses with current ICC/NAFED certified technicians will have a decrease in business which will have a potential tax revenue decrease for the state.

If yes, provide economic impact, costs and benefits as noted below in items a – f.

- a. **Life Cycle Cost.** Use the OFM Life Cycle Cost [Analysis tool](#) to estimate the life cycle cost of the proposal using one or more typical examples. Reference these [Instructions](#); use these [Inputs](#). Webinars on the tool can be found [Here](#) and [Here](#)). If the tool is used, submit a copy of the excel file with your proposal submission. If preferred, you may submit an alternate life cycle cost analysis.
- b. **Construction Cost.** Provide your best estimate of the construction cost (or cost savings) of your code change proposal: N/A

\$[Click here to enter text.](#)/square foot

(For residential projects, also provide \$[Click here to enter text.](#)/ dwelling unit)

Show calculations here, and list sources for costs/savings, or attach backup data pages

- c. **Code Enforcement.** List any code enforcement time for additional plan review or inspections that your proposal will require, in hours per permit application:

This proposal should have no effect on code enforcement or plan review based upon current licensing exceptions which are currently in effect until the current exemptions expire on July 1, 2024.

**Small Business Impact.** Describe economic impacts to small businesses:

Due to the limited number of individuals and companies which have the NICET qualifications, service disruption and demand based upon supply and demand cost for services will increase and businesses with current ICC/NAFED certified technicians will have a decrease in business which will have a potential tax revenue decrease for the state.

- d. **Housing Affordability.** Describe economic impacts on housing affordability:

This proposal does not impact housing affordability.

- e. **Other.** Describe other qualitative cost and benefits to owners, to occupants, to the public, to the environment, and to other stakeholders that have not yet been discussed:

Businesses with current ICC/NAFED certified technicians will have a decrease in business. A decrease in business could result in potential layoffs or possible pay decreases.

Please send your completed proposal to: [sbcc@des.wa.gov](mailto:sbcc@des.wa.gov)

**All questions must be answered to be considered complete. Incomplete proposals will not be accepted.**