

FAARS

FIREFIGHTER AIR REPLENISHMENT SYSTEMS CODE ADOPTION GUIDE



FIREFIGHTER
AIR COALITION

CONGRATULATIONS

By exploring this code adoption guide, you've taken the first step to bring Firefighter Air Replenishment Systems (FARS) to your jurisdiction. We encourage you to join the ranks of forward-looking cities across the United States that have adopted a FARS code and now require these important life safety systems. This guide provides information and resources to assist you in your code adoption process.



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// The Firefighter Air Coalition focuses on the need for smart, responsible air management. It's our passion and our privilege to advance firefighter safety through continued education and training programs and the advancement of important life-saving air supply technology. Together, we can provide firefighters with the tools and expertise to operate in a safe and effective manner, protecting themselves and the communities they serve. //

— Mark E. Fessenden
President
Firefighter Air Coalition

STEPS TO A FARS CODE

1. Determine which FARS code you wish to adopt.

There are three options for codes and standards covering FARS:

- Appendix L of the ICC International Fire Code
- Appendix F of the Uniform Plumbing Code
- The National Fire Protection Association (NFPA) NFPA-1 Annex F 2018 edition and NFPA-1 Annex D 2021 edition

Appendices and annexes must be identified to be enforceable. They are not automatically included with the adoption of the above codes.

2. Confirm that local codes can be adopted in your state.

Check your local and state adoption process to see how best to proceed. Most states allow the adoption by local authorities, but some states have restrictions.

3. Know your rationale for a code and identify potential challenges to code adoption.

FARS are not just for one type of structure. A small town that is unlikely to have mid- or high-rise construction may be planning major structures with big footprints like warehouses, large retail outlets, and regional medical centers. Even large schools, which are being hardened, can make access for firefighters problematic. Understanding future development projects and the challenges they present for air re-supply will help you make a stronger case for adoption and mitigate push-back.

4. Get support from Fire Department leadership.

Ideally, department leadership will be on board and supportive from the outset of code adoption efforts. If not, now that you have all the facts and can make a compelling case, it is critical to ensure you have support from those in charge.

5. Identify the best person(s) to lead your efforts.

It is important to have one or more key personnel who are willing to take on the responsibility of pushing the code adoption. Choose advocates who believe in the concept, are well-versed in the system components, operation, and benefits, and have the ability to carry the message to all stakeholders. Those stakeholders include fire service professionals, city leadership, the commercial construction industry, building owners, and the public. The Firefighter Air Coalition (FAC) is available to provide education and training to support your super advocate.

6. Create a timeline and plan the campaign for adoption.

Work backwards from your jurisdiction's code adoption deadline. The FAC is available to help you with lead time, planning, and message development.

7. Initiate contact with local advocates and stakeholders.

Use your rationale (item 3) as a basis for your message and keep your messaging simple and consistent.

8. Provide resources to support your messaging.

Use FAC resource materials to support your outreach and messaging. We can provide information on system design, function, cost, testing and maintenance, air quality, and more.

9. Work with local officials and advocates to draft the proposed ordinances.

Research the FARS codes and determine which system requirements work best for your jurisdiction. Prepare your code for adoption with all of the proposed amendments. Considerations include:

- The type of structures/occupancies to cover (mid-rise, high-rise, big box style structures, tunnels)
- The threshold that triggers the code requirement, such as:
 - Any new building 5 or more stories in height
 - Any new building with 2 or more floors below grade
 - Any new building of 250,000 square feet or more in size, regardless of height
- The number and location of fill stations and supporting infrastructure
 - Each stairwell to have a supply riser
 - SCBA fill panels to be located on odd-numbered floors
- New construction only (retrofit requirements should not be recommended until a requirement for new construction has been established)

10. Reach out to other fire departments that have successfully implemented a FARS code for advice and counsel.

The FAC can provide you with a list of peer resources.

11. Seek review and/or approval from jurisdictional legal department.

The proposed code language should be vetted through the department and/or city legal department based on jurisdictional policy and regulation.

12. Implement the code change and train all stakeholders.

Provide "Train-the-Trainer" programs to fire officials with curriculum for on-going training. Develop curriculum for fire inspectors and local industry professionals on proper installation that aligns with the new code and jurisdictional policies. Provide information resources to local advocates to share with building owners, architects, builders, and elected officials as needed.



CODE ADOPTION CASE STUDIES



Phoenix, AZ

Tragic Loss of a Firefighter Leads to One of the Nation's First FARS Codes

In 2001, Phoenix Firefighter Brett Tarver ran out of air in a supermarket fire, became disoriented, and died just 75 feet from an exit door. His death devastated the city and was the inspiration for then Chief Alan Brunacini's "never again" strategy, which addressed the department's need for an offensive firefighting plan for commercial buildings, specialized equipment, and a training program for large non-residential structures.

Brunacini discovered FARS, then a fairly new technology. At the time, only two major cities had FARS codes: San Francisco and San Jose. And since no code standard existed, cities wrote their own FARS codes. Phoenix did exactly that. Three years after Tarver's death, Phoenix began requiring FARS in new construction. Commercial builders warned that the FARS requirement would cripple growth.

It didn't. Between 2010 and 2020, Phoenix was the fastest growing city in the U.S., and within a few years, nearly all of the cities in the Phoenix metro area had codes requiring FARS.



Meridian, ID

Commercial Construction Community Takes Pride in State's First FARS Installation

It was 2021, and Meridian, ID Fire Chief Kris Blume knew the push toward successful adoption of a FARS code would be a worthy endeavor. Meridian was one of the fastest-growing cities in the U.S. and a new high-rise project, Union 93 West, would be the first of many new buildings to dramatically change the downtown and challenge existing resources.

Chief Blume's first steps were to foster mutual understanding among all stakeholders, and secure commitments to protect firefighters and provide them with the best practices in air management. This would include adoption of the FARS code. The mayor and city council backed adoption, and the development community embraced it.

"We're very proud to bring the first FARS system to the state of Idaho," said Rob Fraser, construction manager at Galena Opportunity, Inc., developer of the Union 93 West project. "It will make the firefighters' job easier and make it safer for them to be in the building."



North Central Texas Council of Governments

Inclusive Regional Code Process Supports Responsible Growth and Ensures the Safety of Firefighters and Citizens

The North Central Texas Council of Governments (NCTCOG) is made up of local public- and private-sector code professionals dedicated to simplifying the code adoption process for its 200+ member governments.

They have helped the region grow by standardizing codes, reducing development costs, improving public safety, and ensuring seamless mutual aid among fire departments. In 2021, acting on the recommendation of local fire chiefs, the NCTCOG recommended all of their member governments adopt Appendix L of the International Fire Code and require FARS in their jurisdictions. This came after an extensive vetting process that included members of the development community, elected officials, and the fire service.

Appendix L is now a part of the fire code in numerous cities in the NCTCOG region, including Frisco, Ft. Worth, Grand Prairie, McKinney, Plano, and South Lake. Many more jurisdictions are planning to adopt Appendix L in their next code cycle.

SUPPORT

To connect with fire service leaders who have adopted FARS codes, please contact us and we can make an introduction. Feel free to reach out to these industry advocates with questions or for more information.

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ABOUT THE FIREFIGHTER AIR COALITION

The Firefighter Air Coalition is a non-profit education and advocacy group dedicated to promoting firefighter safety through the use of air management best practices, advanced fireground research, and new technologies, products, systems, and procedures.

To learn more, visit aircoalition.org.

aircoalition.org



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