FEMA GRC REPORT

2023 Q2 Legislative Report

The Fire Equipment Manufacturers' Association's Government Relations Committee (FEMA GRC), comprised of Amerex Fire, Brooks Equipment, and Buckeye Fire Equipment, along with strong support and financial contribution from NAFED, has been working to ensure that fire codes across the country are built around layered fire protection that include portable extinguishers and extinguishing systems. The redundancy of passive and active fire suppression offers the strongest protection to life and property. The FEMA GRC has remained committed to this work ever since its inception in 2003 and is proud of the impact it has had on state and national fire codes.

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Portable Extinguishers Reduce Carbon Footprint of Building Fires

Sustainability is increasingly important to businesses and governments. From water scarcity, the need for greater climate resiliency along the coasts, and the adoption of strict energy codes in cities and states across the country, there has been a significantly greater focus on the carbon footprint of energy generation, vehicles, and—increasingly—buildings.

As governments adopt policies to reduce the carbon footprint of buildings by requiring the electrification of heating and cooling or the use of low carbon construction techniques, it is important to remember the role fire safety can play in keeping occupants safe while also reducing the building's carbon footprint over its entire life cycle. New building materials are leading to faster and faster burn times with the average home now burning up to eight times faster than older homes. Every building fire has the potential to release massive amounts of carbon as the fire spreads and the building is consumed. It is important that passive AND active fire protection, such as portable fire extinguishers, remain fully integrated throughout these new buildings to prevent such fires.

Studies have shown that individuals who have used a portable fire extinguisher intuitively know that portable fire extinguishers can play a vital role in limiting or stopping a fire in its incipient stage, which ultimately also reduces the release of carbon. The sooner you extinguish a fire, stop it from burning fuel and threatening property and lives, the less carbon will be emitted. Till now, there has not been a scientific study demonstrating this.

This year, the FEMA GRC commissioned the respected fire protection engineering firm Jensen Hughes to study the role of portable extinguishers in reducing the carbon footprint of a fire in a sprinklered building. The Jensen Hughes study, titled "A Review of the Impact of Fire Extinguishers in Reducing the Carbon Footprint of Building Fires," found that portable fire extinguishers can further reduce fire-related carbon emissions of a building, beyond the effectiveness of sprinklers on their own, by 93.6%. When used together, sprinklers and portable extinguishers, this results in a total reduction of fire-related carbon emissions by 99%.

The study also found that "there is an increase in carbon emissions each time there is a delay in applying water or other extinguishing agents onto an active fire. Therefore, using portable fire extinguishers early has the potential of providing the highest reduction of carbon emissions [emphasis added] of any emergency fire response." Further, there is a "reduction in carbon emissions during reconstruction activities, since there is less property damage."

The FEMA GRC will be educating policymakers at the state and federal levels on yet another reason why fire codes should embrace portable fire extinguishers throughout buildings. The FEMA GRC is currently working with the General Services Administration (GSA), the federal government's landlord and the largest landlord in the world, to update their fire code to match national model codes and require portable extinguishers throughout their buildings. Currently, the GSA only requires extinguishers in "hazardous" areas such as boiler rooms. Portable fire extinguishers are a safe and effective means to quickly respond to an incipient fire and should continue to be part of the conversation regarding fire safety best practices.

The carbon footprint study, and more resources, can be found at fireextinguisherssavelives.org ■