



NATIONAL ASSOCIATION OF STATE FIRE MARSHALS

NASFM Voter Guidance-ICC Codes

Flammable Refrigerants

ADM47: NMX-J-52 1/2-40-ANCE/ CAN/CSA-22.2/ UL No. 60335-2-40

Online cdpACCESS voting will be open November 18 – 25, 2019

OUR CONCERNS: NASFM, along with our Model Codes Committee have taken the position that the adoption of the 2019 version of the above referenced standard, which allows the use of flammable refrigerants, exposes fire fighters and citizens to unnecessary risk. In defeating this proposal, the referenced standard in the International Residential Code will remain unchanged.

Industry decided to risk developing regulations for the use of flammable refrigerants without input from the public safety community. We have offered our expertise to industry and remain committed to working toward a safe solution for the implementation of more environmentally palatable refrigerants. Yet, we are disappointed they have resisted our overtures while attempting to use an administrative update procedure to achieve their goal after being turned down during the normal code development process.

WHAT CAN BE DONE: NASFM recommends a **Vote to Disapprove** on committee action for this proposal within ADM47-19 concerning the adoption of the 2019 version of UL/CSA/ANCE standard 60335-2-40. A vote to disapprove online in ICC's cdpACCESS will overturn the committee action and retain the 2017 edition for reference within the IRC. This will augment the successful in-person vote at ICC's public comment hearing to overturn the committee and disapprove the update. This is the correct action for public safety and will back up our stated opposition during the ICC public comment hearing along with that of other leading fire service group representatives.

WHY THIS MATTERS: The National Association of State Fire Marshals is opposed to updating the standard for air conditioners to accommodate flammable refrigerants – UL/CSA/ANCE 60335-2-40-2019. We ask that membership consider overturning the decision of the Administrative Committee and maintain the protections afforded in the current 2017 IRC. This is consistent with recent actions taken by the IMC committee and the membership during the 2021 Group A cycle last Fall.

While a lot of work has been accomplished to identify and mitigate the risks associated with these flammable refrigerants, significant work remains before there is solid scientific justification to support this change and the associated risks.

For instance, we have learned that flammable refrigerant detectors aren't durable enough to serve their intended purpose in these systems; they may only last a few months to a few years at best. These systems,

many times, are in service for decades. It's likely, as we have experienced with battery powered smoke alarms, that homeowners will find ways to circumvent the detection system if they don't perform as intended for the life of the equipment.

In addition, when these flammable refrigerants are introduced to flame, they will ignite, burn completely and produce significant quantities of hydrofluoric acid (HF). This highly corrosive contact poison can penetrate tissue, readily poisoning firefighters and citizens through exposure of skin or eyes, or when inhaled or swallowed. The fire service must be educated on safe practices when dealing with this increased risk.

This training for the fire service will take some time. Without this training, which is vitally necessary to inform responding fire fighters of these new risks, we needlessly place first responders in harm's way. Risks, which include flammability and combustion byproduct issues, including the previously mentioned hydrofluoric acid (HF) poisoning, must be addressed through proper training.

Introducing a product safety standard as a stand-alone document in the code is an ill-conceived idea. Product safety standards of this type need installation criteria, either in the form of code provisions or an installation standard, to complete the regulatory loop. The code requires many products to be listed, then goes on to say how they should be installed and maintained. We understand that such an installation standard is under development, but it is not yet available. The update of this standard absent the accompanying installation standard only further escalates the risks imposed on fire fighters.

Overturning the committee action will slow down the process and provide the time needed to develop reasonable installation criteria, identify and repair any flaws in the proposed standard, and implement training programs for fire fighters.

RECOMMENDED ACTIONS:

1. **Vote to Disapprove** the committee action on ADM47: NMX-J-52 1/2-40-ANCE/ CAN/CSA-22.2 No. 60335-2-19 regarding adoption of UL/CSA/ANCE standard 60335-2-40 in cdpACCESS.
2. **Urge other fire and building enforcement professionals** to exercise their votes and oppose adoption of this proposal within ADM47-19. Public and firefighter safety is at risk.

Who Are State Fire Marshals?

State Fire Marshals are the senior fire officials in the United States. State Fire Marshals' responsibilities vary from state to state, but they are primarily responsible for fire safety code adoption and enforcement, fire and arson investigation, fire incident data reporting and analysis, public education, and advising Governors and State Legislatures on fire protection policy issues. Some State Fire Marshals are responsible for fire fighter training, hazardous materials incident responses, wildland fire response and the regulation of natural gas and other pipelines.