



Washington Air Conditioning Contractors Association
5727 Baker Way NW, Suite 200
Gig Harbor WA 98332

September 25, 2019

Dear Members of the Washington State Building Code Council:

On behalf of the WA Air Conditioning Contractors Association (WAACCA), a state-based trade group of HVAC/R contractors, distributors and industry partners, we are opposing the inclusion of items 75, 78 & 79 in the amendments to the International Residential Code that would allow A2L refrigerants in residential systems. We oppose this addition for the following reasons:

First, the 2018 and 2021 editions of IMC and IFC have rejected the addition of A2L flammable refrigerants in direct HVAC systems until all safety concerns are addressed and the research is complete. We expect the UMC to do the same. In addition, there are no safety provisions related to A2L (flammable) refrigerants for direct air conditioning systems proposed for the IRC.

At this point, the HVAC/R contractors represented by the WA Air Conditioning Contractors Association do not feel the necessary safety training is available for our workers and to include these flammable refrigerants in the code at this point would jeopardize the safety of our contractors and consumers.

We also agree with the concerns of the national Air Conditioning Contractors Association (ACCA) that the proposed code changes adding A2L flammable refrigerants for use in residential applications for the 2021 editions of the ICC and IAPMO model codes are premature for the following reasons:

- **Standards:** Product safety standards (UL 2-40) and application standards (proposed ASHRAE 15.2) are currently being revised and probably have one or more years to go until the public review process is completed.
- **Training:** Contractor and technician training for safely handling, transporting, installing, servicing, and maintaining products that contain flammable refrigerants has not been developed ... let alone launched for residential applications.
- **Equipment application:** It is unclear what design and safety considerations are needed when flammable equipment are to be installed in varied housing types and configurations.
- **Field practices:** It is unclear as to how field servicing practices and maintenance procedures may need to be revised for flammable refrigerants.
- **Special tools:** It is unknown what special tools, instrumentation, sensors, and safety equipment may be needed in the field to work on, and around, equipment that contains flammable refrigerants.

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- **Cross-contamination:** Today, contractors are routinely recovering refrigerants in the field that have been cross-contaminated by other refrigerants. This is indicative that today's servicing practices and prohibitions are not robust enough to keep the right refrigerant in the right system.

These concerns all have undefined varying impacts on occupant health and safety, and worker health and safety, as well as on the ultimate costs to ensure a safe infrastructure.

In addition, WAACCA believes this addition is literally putting the cart before the legislative horse. The 2019 Washington State Legislature just passed E2SHB 1112, prohibiting HFCs using the list from the EPA SNAP 20 & 21 – focusing on commercial systems. WAACCA consistently asked for a delay in the January 2020 start date in order to provide more time to get the necessary safety training out to the contractors around the state. We were not successful in this delay, and the fact remains that the implementation of E2SHB 1112 is still underway. The Department of Ecology is developing the list of approved alternatives, stakeholder meetings and outreach are being scheduled, and the Washington State Building Code is beginning its discussions of how to implement this bill.

Section 7 of the bill reads as follows:

“The building code council shall adopt rules that permit the use of substitutes approved under section 3 of this act and that do not require the use of substitutes that are restricted under section 3 of this act.”

Section 3 gives the Department of Ecology (DOE) explicit authority to develop the list of approved substitutes for implementation of this section. The State Building Code should only reference proposed substitutes approved by DOE and should not approve any substitutes on its own, particularly prior to any approved list being developed in the state.

Another concern is that as HB 1112 moved through the Legislature, it only addressed phasing out HFCs in commercial applications. In fact, Section 8 of E2SHB 1112 sets out a study by the Department of Ecology, Department of Commerce and the State Utilities and Transportation Commission “*addressing how to increase the use of refrigerants with a low global warming potential in mobile sources, utility equipment, and consumer appliances, and how to reduce other uses of hydrofluorocarbons in Washington.*” The report is due to the Legislature by December 1, 2020.

Even though the A2L refrigerant in the current proposed addition to the IRC is not required, its approval flies in the face of legislative discussions held just a few months ago and unnecessarily puts contractors and consumers at risk. The state has adopted a bill to begin phasing out HFCs and approving alternatives. The State Building Code will be actively engaged and involved in this process. We ask that you table this current proposal and instead work toward implementation of the bill which will better identify approved substitutes and allow more time for the training needed to ensure safety of workers and the public.

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Finally, according to the Washington Administrative Code, proposals submitted to the State Building Code Council should meet the following criteria...

- (a) The amendment is needed to address a critical life/safety need.
- (b) The amendment clarifies the intent or application of the code.
- (c) The amendment is needed for consistency with state or federal regulations.
- (d) The amendment corrects errors and omissions.
- (e) The amendment eliminates an obsolete, conflicting, duplicating or unnecessary regulation.

Since adding this refrigerant puts our contractors and residents in danger without proper training in place, we believe the proposal violates item (a). And, since there is no requirement to phase out HFC refrigerants in residential structures, the proposal does not meet the requirement of item (b). There is no federal regulation at this point and the state legislation that just passed is still in the regulatory adoption phase, so it does not rise to the level of item (c), and there is no error or omission being corrected, so it does not meet the requirement in item (d).

And finally, since the implementation of HB 1112 is still on-going, this proposal has the possibility of conflicting with or duplicating regulations adopted under that legislative proposal, so it violates item (e).

Once again we urge you to pull this amendment from the IRC code changes and instead discuss it in context with the implementation of HB 1112.

Sincerely,

Melissa Olson Frause
President
Washington Air Conditioning Contractors Association