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DEPARTMENT OF DEFENSE

Office of the Secretary

[Docket ID: DoD-2025-OS-0022]

Unified Facilities Criteria Revision Impacting Variable Refrigerant Flow Systems

AGENCY: Under Secretary of Defense for Acquisition & Sustainment, Department of Defense (DoD).

ACTION: Notification of revision to Unified Facilities Criteria (UFC) regarding the use of variable refrigerant flow (VRF) systems.

SUMMARY: The DoD is proposing an update regarding the use of VRF systems in the UFC requiring notification pursuant to the National Defense Authorization Act for Fiscal Year 2022, REVISIONS TO UNIFIED FACILITIES CRITERIA REGARDING USE OF VARIABLE REFRIGERANT FLOW SYSTEMS. The updates include UFC regarding Mechanical Engineering; Heating, Ventilation, and Air-Conditioning; Youth Centers; Child Development Centers; Continuous Child Care Facilities.

DATES: Comments are due by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may submit comments, identified by docket number and title, by any of the following methods:

Federal eRulemaking Portal: http://www.regulations.gov. Follow the instructions for submitting comments.

Mail: Department of Defense, Office of the Assistant to the Secretary of Defense for Privacy, Civil Liberties, and Transparency, Regulatory Directorate, 4800 Mark Center Drive, Mailbox #24, Suite 05F16, Alexandria, VA 22350-1700.

Instructions: All submissions received must include the agency name, docket number and title for this Federal Register document. The general policy for comments and other submissions from members of the public is to make these submissions available for public viewing on the Internet at http://www.regulations.gov as they are received without change, including any personal identifiers or contact information.

SUPPLEMENTARY INFORMATION: Several proposed revisions to UFC will impact the use of VRF systems. The proposed revisions are stated in the following paragraphs, organized by UFC number. The current versions of these UFC can be found at the following website: https://www.wbdg.org/dod/ufc.

UFC 3-401-01 Mechanical Engineering: New paragraph proposed to address safety relative to use of flammable refrigerants:

> Comply with ASHRAE Standard 15. Distribution and use of ASHRAE Standard 34 flammability classified refrigerants of 2L and higher refrigerants is limited to non-occupied machine or mechanical rooms, complying with ASHRAE Standard 15, or to the exterior of the building.
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> Such refrigerants are also permitted in non-occupied rooms (example: telecommunication rooms) with the following features:
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> - building exterior access only
> - perimeter walls continuous from exterior wall to exterior wall or adjacent interior partition, or combination thereof
> - perimeter walls continuous from finished floor to roof deck or floor deck above
> - perimeter walls continuous through all concealed spaces including those above ceiling
> - no openings or transfer paths to adjacent spaces

UFC 3-410-01 Heating, Ventilating, and Air-Conditioning: Update to definition of Variable Refrigerant (VRF) System in Appendix, *Best Practices*, is proposed to be revised to:

> A variable refrigerant flow (VRF) system is defined as any system having digital, centralized control over refrigerant flow rates and system wide control

> of terminal units and compressors that integrates control over fans, compressors, expansion valves, operational modes, and space conditions. They are heat pump systems in which refrigerant is moved from fan-coil unit to fan-coil unit within the occupied facility spaces.

UFC 4-740-06 Youth Centers, UFC 4-740-14 Child Development Centers, and UFC 4-740-15 Continuous Child Care Facilities: New paragraph proposed to address safety, including flammability and asphyxiation risks, relative to use of refrigerants for childcare facilities in the update for each of three related UFC:

> Use of flammable and toxic refrigerants must follow ASHRAE Standard 15, Safety Standard for Refrigeration Systems. In addition, to prevent the risk of exposing occupants to flammable refrigerants and asphyxiation hazards, refrigerant piping must not be routed in, through, or above any occupied space or associated air return plenum. Furthermore, refrigeration-based equipment must not be located in or above any occupied space or associated air return plenum, or have refrigerant coils ducted to any occupied spaces. Refrigeration-based systems may be used in utility or other unoccupied spaces such as telecom, electrical, cold storage, or mechanical rooms in compliance with ASHRAE Standard 15 and previously mentioned restrictions.

*Authority***:** Sec. 2842, Public Law 117-81, 135 Stat. 1541.

Dated: June 12, 2025.

Aaron T. Siegel,

Alternate OSD Federal Register Liaison Officer,

Department of Defense.

[FR Doc. 2025-11002 Filed: 6/13/2025 8:45 am; Publication Date: 6/16/2025]