

VIRGINIA STATE BUILDING CODE TECHNICAL REVIEW BOARD

I N T E R P R E T A T I O N

Interpretation Number: 1/2022

Code: USBC, Part I, Virginia Construction Code/2018

Section No(s): Section 112.2, 112.3, 403.3(VFGC)/G2414.3(VRC), and 404.17.1(VFGC)/G2415.17.1(VRC)

112.2 Alternative methods and materials.

In accordance with § 36-99 of the Code of Virginia, where practical, the provisions of this code are stated in terms of required level of performance so as to facilitate the prompt acceptance of new building materials and methods. When generally recognized standards of performance are not available, this section and other applicable requirements of this code provide for acceptance of materials and methods whose performance is substantially equal in safety to those specified on the basis of reliable test and evaluation data presented by the proponent. In addition, as a requirement of this code, the building official shall require that sufficient technical data be submitted to substantiate the proposed use of any material, equipment, device, assembly or method of construction. The building official may consider nationally recognized guidelines in making a determination.

112.3 Documentation and approval.

In determining whether any material, equipment, device, assembly or method of construction complies with this code, the building official shall approve items listed by nationally recognized testing laboratories, when such items are listed for the intended use and application, and in addition, may consider the recommendations of RDPs. Approval shall be issued when the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code and that the material, equipment, device, assembly or method of construction offered is, for the purpose intended, at least the equivalent of that prescribed by the code. Such approval is subject to all applicable requirements of this code and the material, equipment, device, assembly or method of construction shall be installed in accordance with the conditions of the

approval and their listings. In addition, the building official may revoke such approval whenever it is discovered that such approval was issued in error or on the basis of incorrect information, or where there are repeated violations of the USBC.

G2414.3 (403.3) Other materials.

Material not covered by the standards specifications listed herein shall be investigated and tested to determine that it is safe and suitable for the proposed service, and, in addition, shall be recommended for that service by the manufacturer and shall be *approved by the code official*.

G2415.17.1(404.17.1) Limitations.

Plastic pipe shall be installed outdoors underground only. Plastic pipe shall not be used within or under any building or slab or be operated at pressures greater than 100 psig (689 kPa) for natural gas or 30 psig (207 kPa) for LP-gas.

Exceptions:

1. Plastic pipe shall be permitted to terminate above ground outside of buildings where installed in premanufactured *anodeless risers* or service head adapter risers that are installed in accordance with the manufacturer's instructions.
2. Plastic pipe shall be permitted to terminate with a wall head adapter within buildings where the plastic pipe is inserted in a *pipng* material for *fuel gas* use in buildings.
3. Plastic pipe shall be permitted under outdoor patio, walkway and driveway slabs provided that the burial depth complies with [Section G2415.12](#).

403.3 Other materials.

Material not covered by the standards specifications listed herein shall be investigated and tested to determine that it is safe and suitable for the proposed service, and, in addition, shall be recommended for that service by the manufacturer and shall be *approved by the code official*.

404.17.1 Limitations.

Plastic pipe shall be installed outdoors underground only. Plastic pipe shall not be used within or under any building or slab or be operated at pressures greater than 100 psig (689 kPa) for natural gas or 30 psig (207 kPa) for LP-gas.

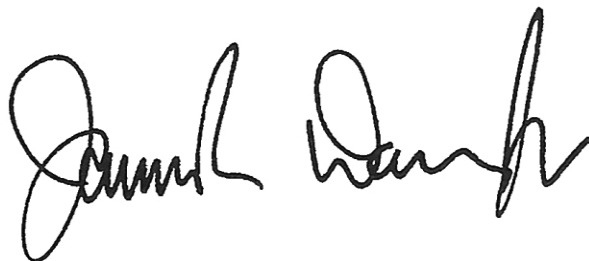
Exceptions:

1. Plastic pipe shall be permitted to terminate above ground outside of buildings where installed in premanufactured anodeless risers or service head adapter risers that are installed in accordance with the manufacturer's instructions.
2. Plastic pipe shall be permitted to terminate with a wall head adapter within buildings where the plastic pipe is inserted in a piping material for fuel gas use in buildings.
3. Plastic pipe shall be permitted under outdoor patio, walkway and driveway slabs provided that the burial depth complies with [Section 404.12](#).

QUESTION #1: Is PEX-AL-PEX pipe, listed under ICC-ES Product Certificate PMG-1588, and proposed for use as fuel gas piping within or under a building, at least equivalent in safety and suitability, to other pipe materials listed for such use in the Virginia Fuel Gas Code and the Virginia Residential Code?

ANSWER: No, the VFGC and VRC require polyethylene plastic pipe and tubing used for fuel gas to conform to ASTM D2513 and aluminum-alloy pipe and tubing used for fuel gas to conform with ASTM B241 (or B210). PEX-AL-PEX does not conform to either of these standards.

This Official Interpretation was issued by the State Building Code Technical Review Board at its meeting of February 11, 2022.



Chairman, State Building Code Technical Review Board