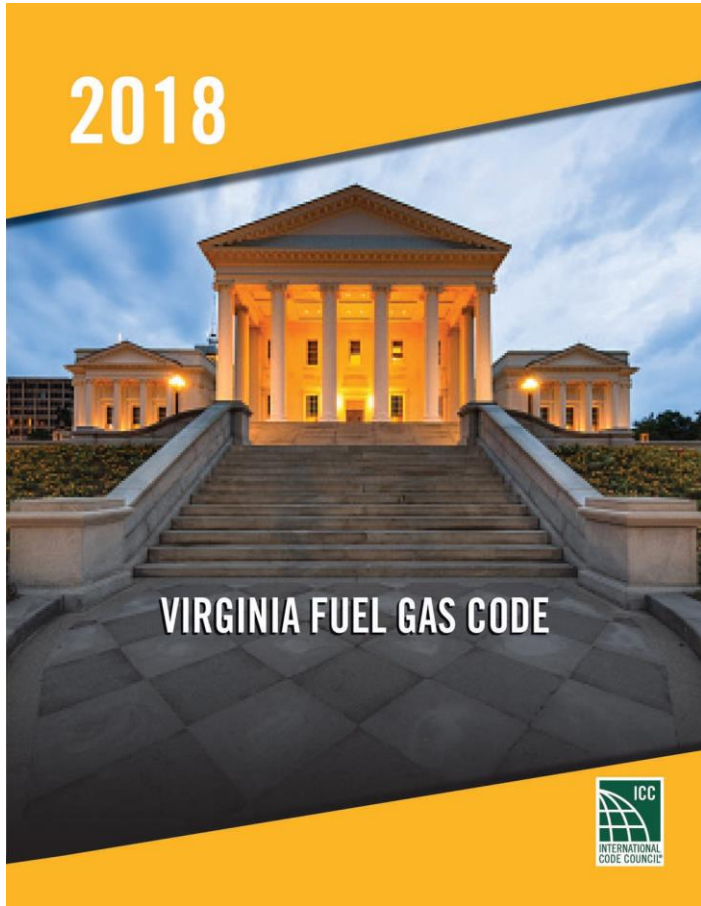


2018 Code Change Training

2018 Virginia Fuel Gas Code (VFGC)

Significant International Changes and
State Amendments



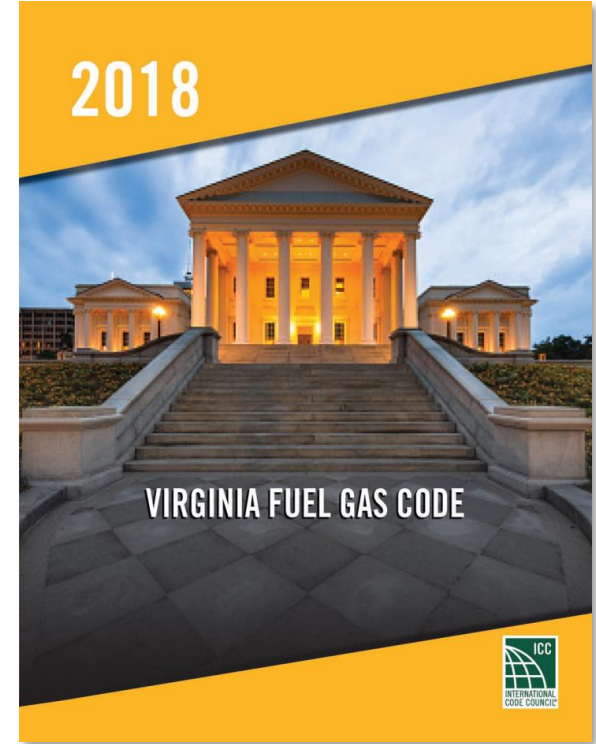
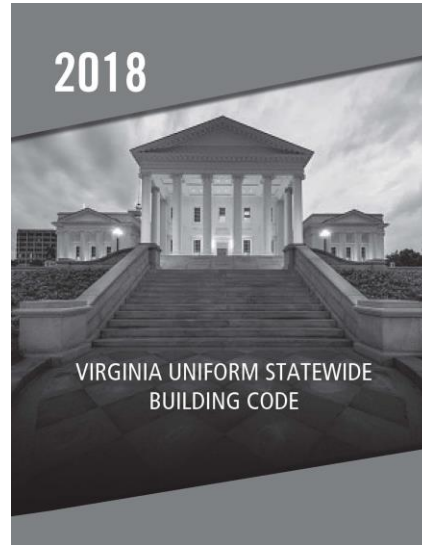


Agenda

Significant Fuel Gas Code Changes

- Virginia Fuel Gas Code (VFGC) changes in chapter order

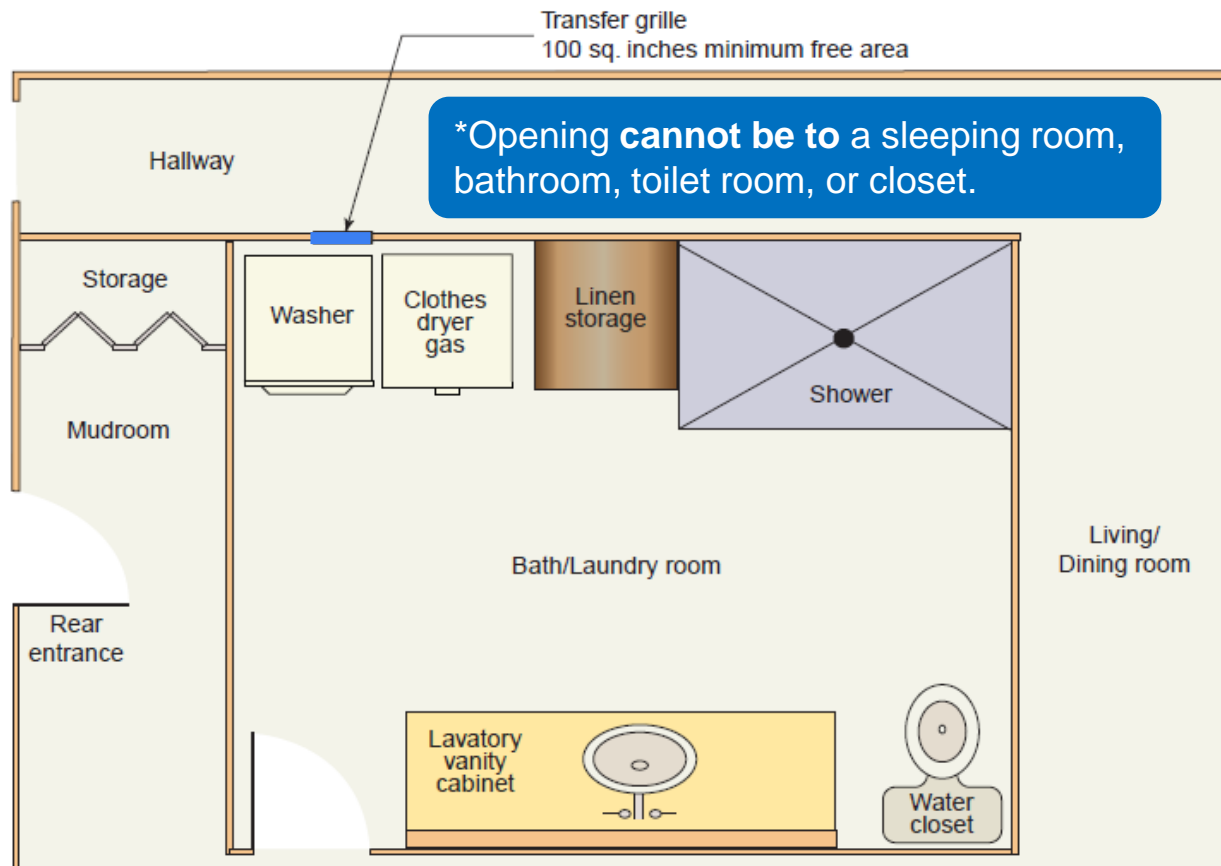
Virginia USBC and the IFGC



303.3 / G2406.2

Gas-fired Clothes Dryers in Bathrooms

- New exception allows a gas-fired clothes dryer in a toilet room or bathroom, with a permanent vent opening*.



310.2, 310.3

Bonding of CSST and Arc-resistant CSST

- Not a change – VA added this in the 2015 cycle
- The International Code is now consistent with Virginia regarding Arc-resistant CSST.



Arc-resistant CSST



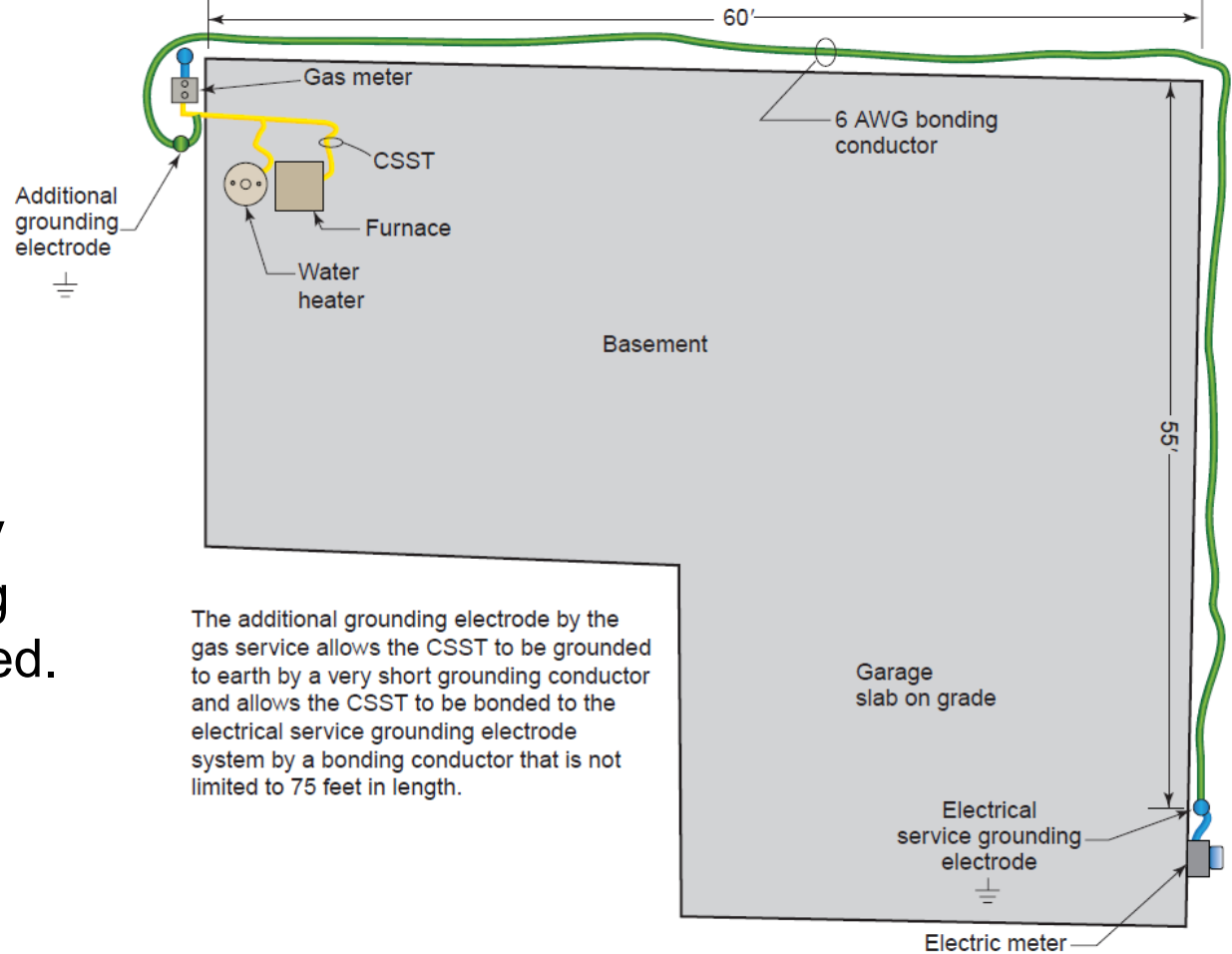
Non-arc-resistant CSST



310.2.3

Grounding Electrodes for CSST Bonding

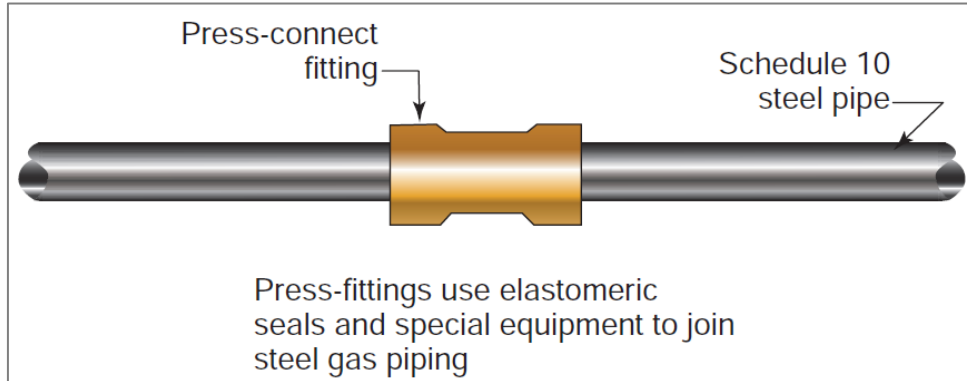
- The purpose of “any additional grounding electrodes” is clarified.



An additional grounding electrode can be installed to stay within the length limitation of 75 feet.

403.4.2, 403.10.1 – Schedule 10 Steel Gas Pipe and Joints

- The Fuel Gas code now allows Schedule 10 steel pipe meeting certain standards.
- Press-connect fittings added to 403.10.1 (Metallic piping joints and fittings)
- Proper protection is critical

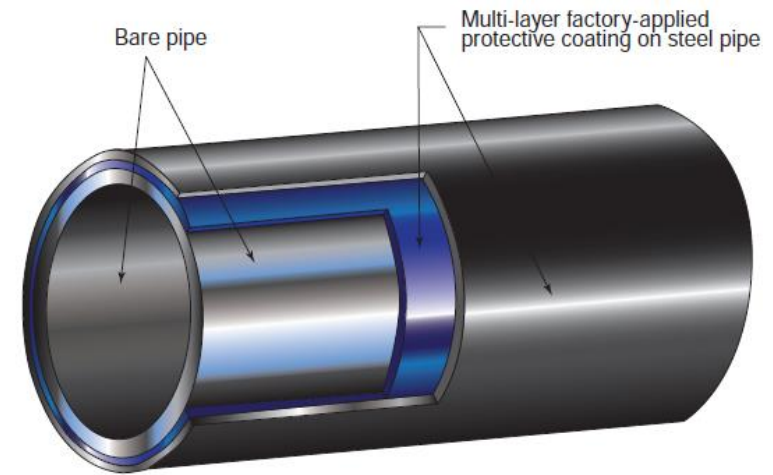


...shall comply with the dimensional standards of ASME B36.10M and one of the following standards:

- ~~1. ASME B36.10, 10M.~~
1. ASTM A53/A53M.
- ~~2. ASTM A106.~~
3. ASTM A312.

404.11 - Corrosion Protection for Steel Gas Pipe

- This section was rewritten for clarity and now lists three distinct prescriptive methods for protection from corrosion for steel pipe underground.



Factory applied corrosion protection for underground steel pipe



Anodeless riser

404.14

Piping Underground beneath Buildings

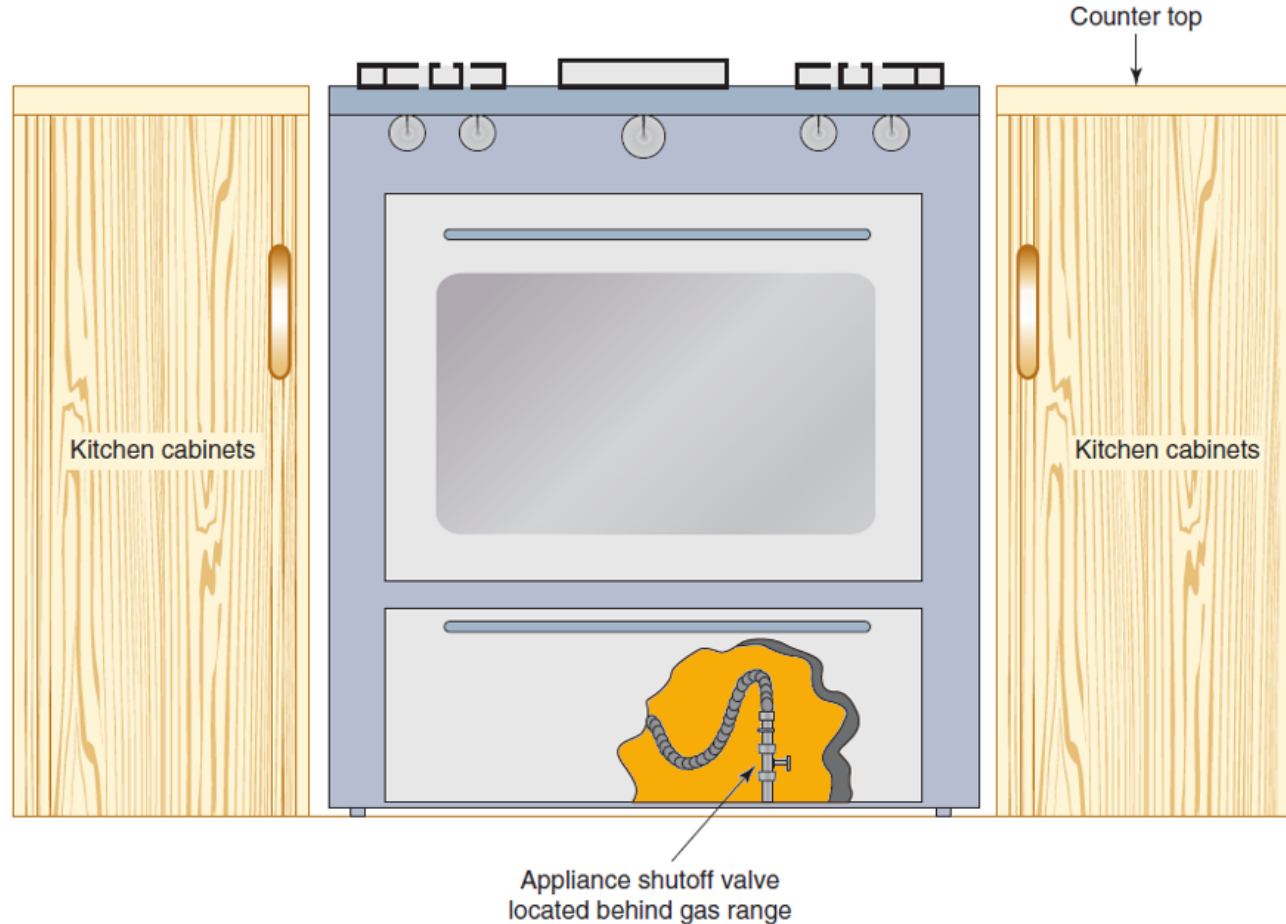
- A **listed encasement system** instead of a conduit encasement is recognized where piping is installed underground beneath buildings.



409.5.1

Access to Shutoff Valves for Movable Appliances

- Clarifies that shutoff valves behind movable appliances meet the code intent for access.

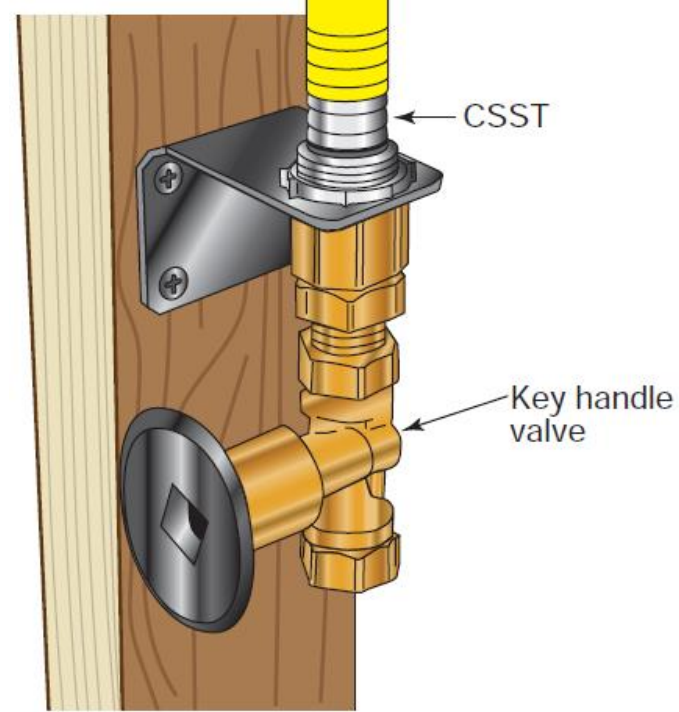
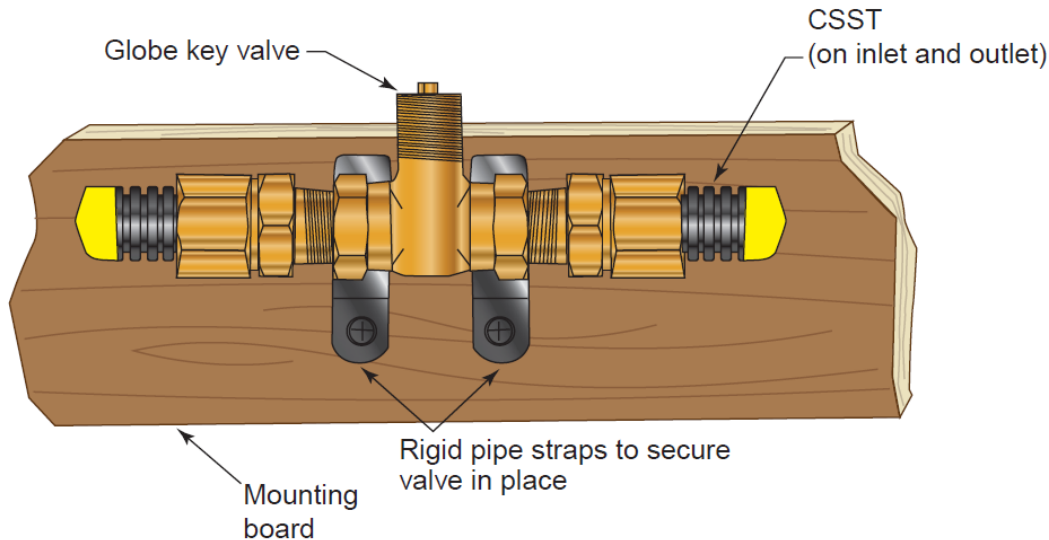


Shutoff valve behind gas range meets the requirement for access

409.7

New Section - Shutoff Valve Support for Tubing Systems

- Independent “rigid and secure” support required.

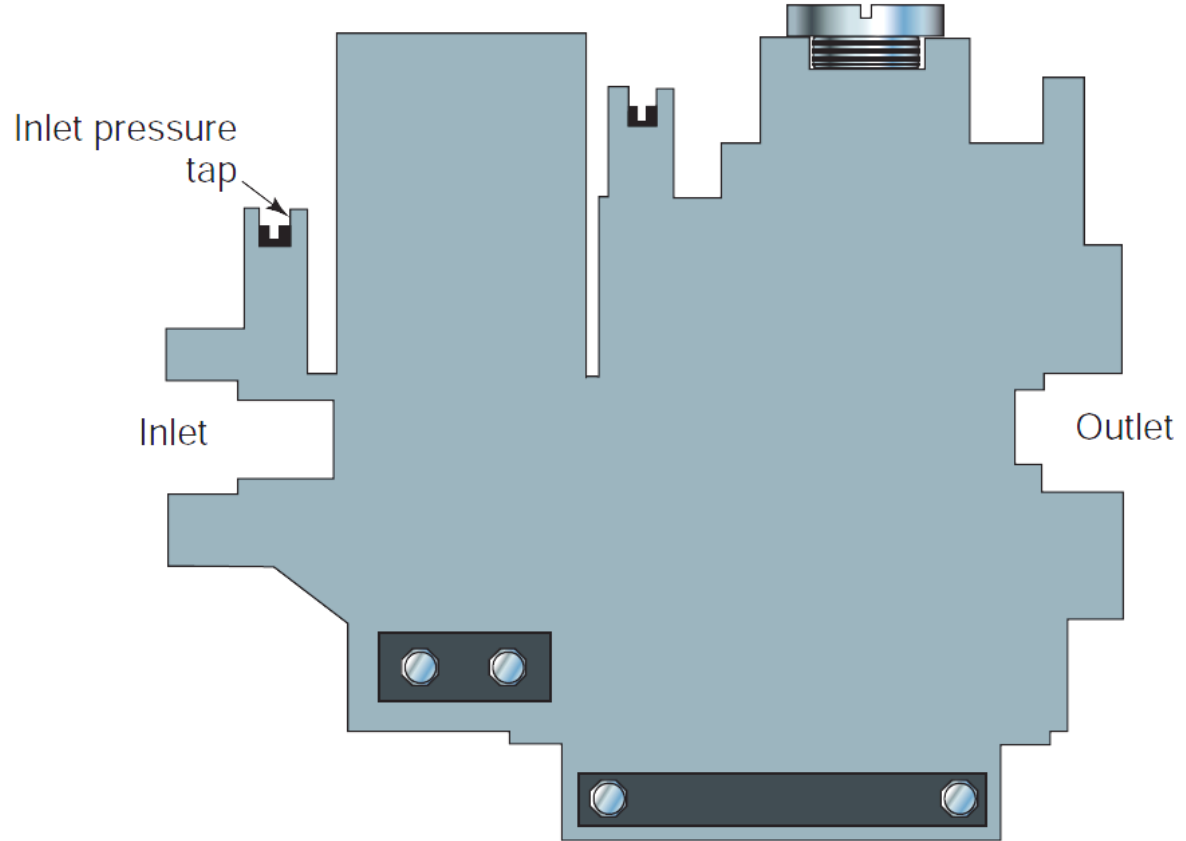


Key handle valve with support independent of gas tubing

410.2

MP Regulator and Appliance Pressure Test Port

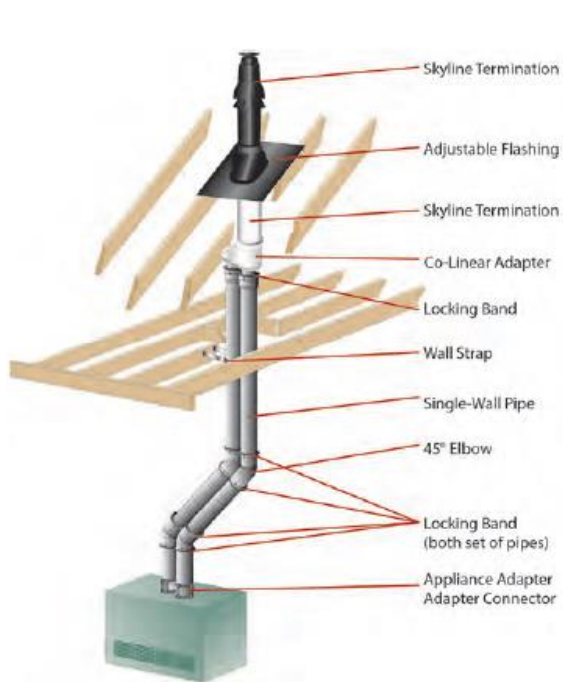
- The code provides a new alternative to the required pressure tap fitting downstream of a medium pressure regulator.



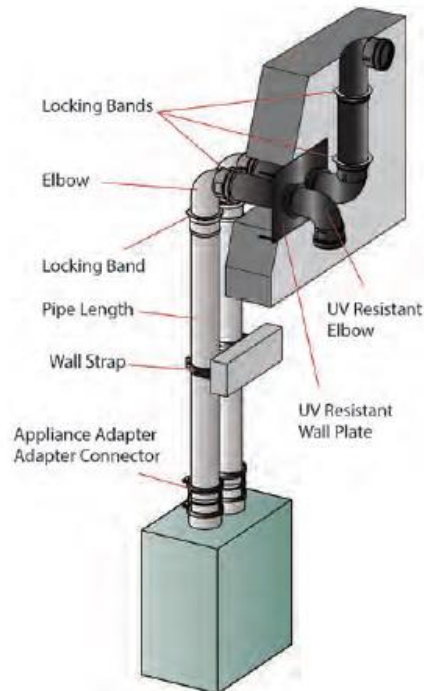
Combination gas valve with pressure test port on the gas control inlet side

503.4.1, 503.4.2 - Standards for Plastic Pipe Venting Materials

- Adds a new standard for plastic pipe, and specifies that the plastic used (including joints) must be listed in the manufacturer's instructions or to UL1738.



Polypropylene plastic vent system



Polypropylene plastic vent system

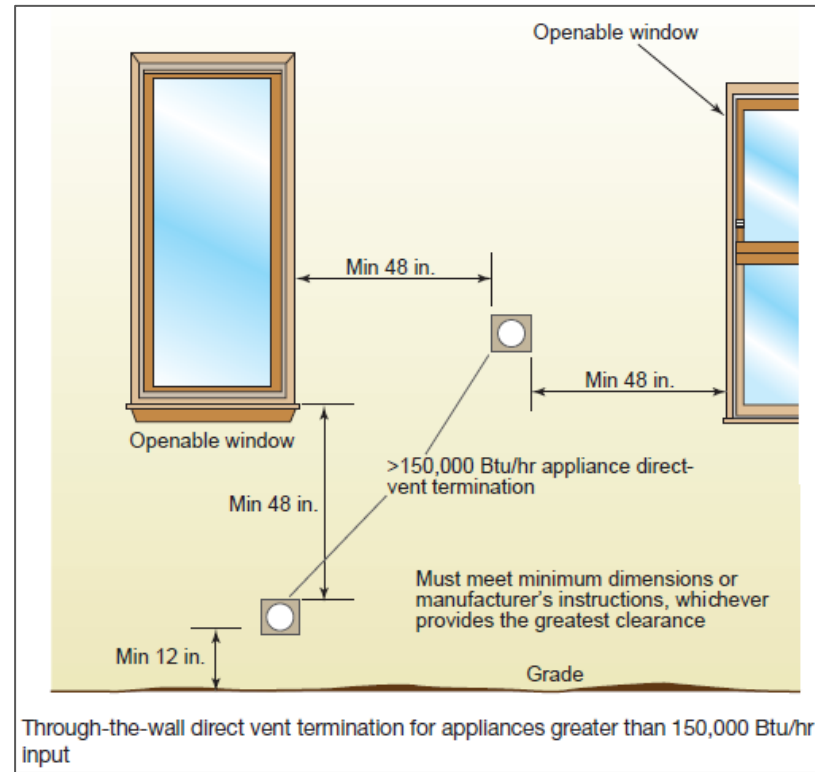


Plastic vent system conforming to UL 1738

503.8 item #3 - Now a Table

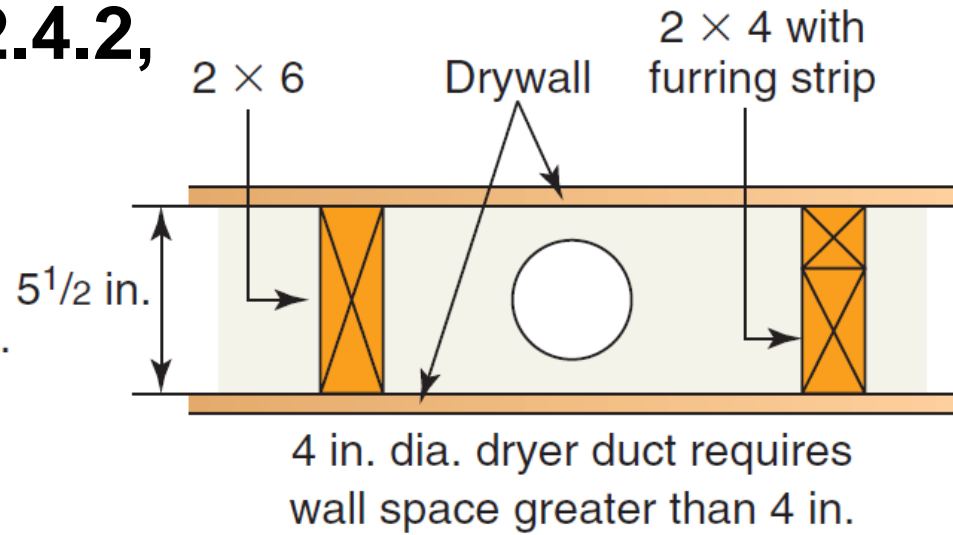
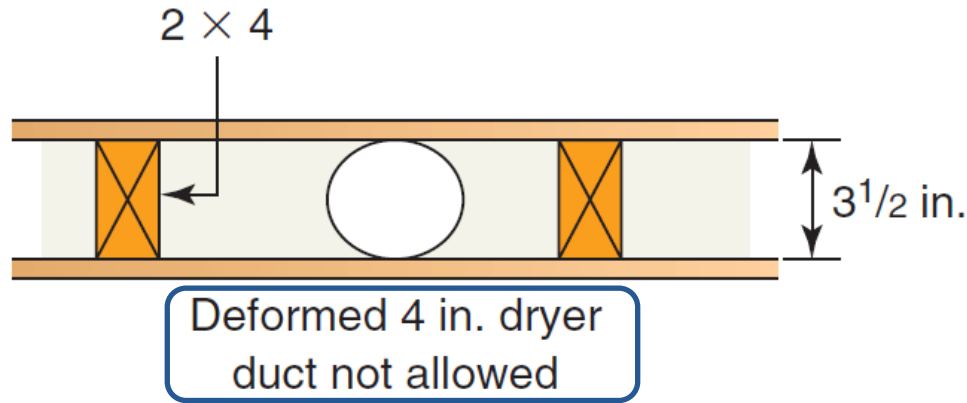
TABLE 503.8 Through-The-Wall Direct-Vent Termination Clearances

Direct-Vent Appliance Input Rating (Btu/hr)	Through-The-Wall Vent Terminal Clearance From Any Air Opening Into The Building (Inches)
< 10,000	6
$\geq 10,000 \leq 50,000$	9
$> 50,000 \leq 150,000$	12
$> 150,000$	In accordance with the appliance manufacturer's instructions and not less than the clearances specified in Section 503.8, Item 2



- Item 3 text was reformatted into table 503.8.
- A new category was added for direct-vent appliances having higher input ratings, which is more consistent with non-residential appliances.

FG614.8.2, 504.8.2, M1502.4.2,



Plan view

Concealed Dryer Exhaust Ducts

- Wall and ceiling cavities enclosing dryer exhaust ducts must provide sufficient space that the 4-inch duct is not squeezed out of its round shape.
- (VA continues to modify this section to not allow fastener penetrations into the duct)

~~618.2/ G2442.2 - Forced-Air Furnace Duct Size~~



Deleted in favor of other sizing methods specific to the appliance.

- Wasn't consistent with industry practice or IRC/IMC
- Sizing of ducts and transfer openings must be in accordance with:
 - ACCA Manual D – OR
 - Appliance manufacturer's installation instructions – OR
 - Other approved methods, such as an engineered design



623.2 / G2447.2 – Prohibited location (Residential)

- Commercial cooking appliances are now permitted in dwelling units when installed per an engineered design and the manufacturer's instructions.



Questions?

Fuel Gas Skill Check



Thank You For Attending!

2018 Virginia Fuel Gas Code (VFGC)

Significant International Changes and
State Amendments

