Volume 26 Issue 2

THE PLUMB LINE

SUMMER 2026

PROTECTIVE HEALTH CODES STAFF ANNOUNCEMENTS

Ric Mayhan is retiring at the end of June and Ralph McClenahan will be the interim Manager over the Plumbing and Natural Gas Section at the Arkansas Department of Health. We also want to announce the Hector Balada Jaime, has joined our team as the Plumbing Plan Review Coordinator, replacing retired Pam McCullah.

FINES AND PENALTIES

Jason Pagett-No License-$4,000

Frank Swank-MP4989-No Permit-Consent-$2,000

Bryce Gammill-No License-$3,000

Undra Fletcher-No License-$4,000

Kenneth Ketchens-No License-$6,000 & $1,000

Randy Fraser-MP5423-Utilizing Unlicensed Person-$1,000

Edwin Calix Handyman Service-No License-Consent-$1,000

THE LAW

§17-38-204. Local regulatory authority — Exceptions.

(a) A city, town, or county having a system of either water, sewerage, or gas utility, or a combination of utilities, by ordinance, rules, regulations, or customer contract shall prescribe rules and regulations governing plumbing not in conflict and equal to or exceeding the minimum standards prescribed by the Department of Health.

(b) A plumbing installation shall not be:
(1) Installed in any building within this state except in accordance with or exceeding the minimum requirements of the department; or
(2) Started without the prescribed licenses, permits, and acceptable plan review of plumbing plans and specifications when required.

THE DIRT ON SEDIMENT TRAPS

Official Interpretation of the 2018 Arkansas Fuel Gas Code

State Committee of Plumbing Examiners

June 17, 2026

SECTION 408 DRIPS AND SLOPED PIPING

This is the same code that we've had in the 2006 Arkansas Fuel Gas Code but there appears to be a need for clarity regarding these code sections. The code states that :

*"**408.1 Slopes**: Piping for **other than dry gas conditions**, shall be sloped not less than a ¼" in 15 feet to prevent traps**.""***

***408.2: Drips. Where wet gas exists**, a drip shall be provided at any point in the line of pipe **where condensate could collect**. A drip shall be provided at the outlet of the meter…."* Check with your gas utility but most natural gas provided in Arkansas is dry. If it's not, then the conditions above SHALL be met.

"408.4 Sediment Trap: *Where a sediment trap is not incorporated as part of the appliance, a sediment trap shall be installed downstream of the appliance shutoff valve as close to the inlet of the appliance as practical. The sediment trap shall be either **a tee fitting with a capped nipple in the bottom most opening of the tee** or other device approved as an effective sediment trap. Illuminating appliances, ranges, clothes dryers and outdoor grills need not be so equipped."*

This is where language of the Codes had been lacking and has led to the practice of installing the "the Run" the straight through opening of the tee in the horizontal plan, with "the Branch" opening turned down. This is not correct, "The Run" of tee should be installed in the vertical plan, with the bottom side capped. "The Branch" should be installed in the horizontal plan and cause the fuel to make a ninety-degree turn between the "the Run" and the "the Branch", ensuring that sediment is inclined to drop to the capped nipple at the bottom of "the Run". See attached from the Fuel Gas Commentaries that depict the desired configuration. This is NOT NEW, this has always been the industry standard for Sediment Traps, and this is what the manufacturers require of the supply connections on appliance with no integral sediment trap . **If you are connecting the gas supply to the appliance and it is not in the exclusion list above and has no integral sediment trap, installation of a proper Sediment Trap is required.**

2018 ARKANSAS FUEL GAS CODE SECTION 408 DRIPS AND SLOPED PIPING

❖ With excerpts from the 2018 IFGC Commentary

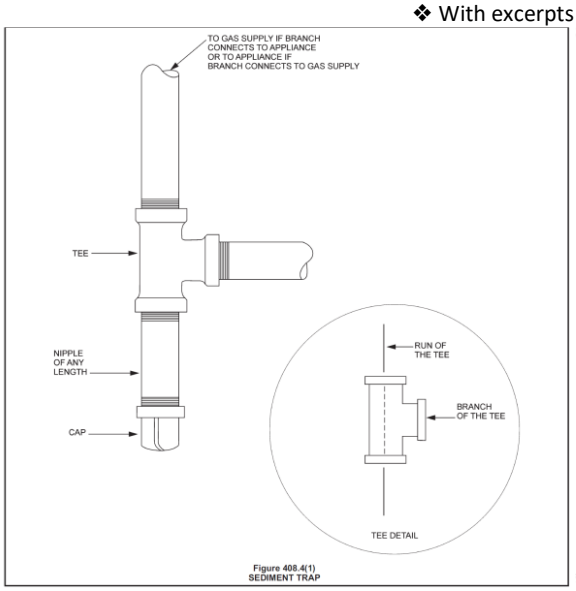

Figure 408.4(1)
SEDIMENT TRAP

Figure 408.4(2)
PROHIBITED TRAP CONFIGURATION

2018 ARKANSAS FUEL GAS CODE SECTION 408 DRIPS AND SLOPED PIPING

❖ With excerpts from the 2018 IFGC Commentary

Slopes. *Piping* for other than dry gas conditions shall be sloped not less than 1/4 inch in 15 feet (6.3 mm in 4572 mm) to prevent traps.

❖ The required minimum slope (0.14 percent) is intended for gas known to contain enough water vapor to cause condensate to form inside the piping. Such conditions are rarely, if ever, encountered today.

408.2 Drips. Where wet gas exists, a drip shall be provided at any point in the line of pipe where condensate could collect. A drip shall be provided at the outlet of the meter and shall be installed so as to constitute a trap wherein an accumulation of condensate will shut off the flow of gas before the condensate will run back into the meter.

❖ Drips, often referred to as "drip legs," are distinct from sediment traps. Modern gas supplies and distribution systems are typically dry; thus, drips would be required only when recommended by the gas supplier.

408.3 Location of drips. Drips shall be provided with ready access to permit cleaning or emptying. A drip shall not be located where the condensate is subject to freezing.

❖ A drip is not the same as a sediment trap. They are required for different reasons (see Section 408.4).

408.4 Sediment trap. Where a sediment trap is not incorporated as part of the appliance, a sediment trap shall be installed downstream of the appliance shutoff valve as close to the inlet of the appliance as practical. The sediment trap shall be either a tee fitting with a capped nipple in the bottom most opening of the tee or other device approved as an effective sediment trap. Illuminating appliances, ranges, clothes dryers and outdoor grills need not be so equipped.

❖ In addition to the code requirement, most appliance manufacturers require the installation of a sediment trap (dirt leg) to protect the appliance from debris in the gas. **Note that a drip leg is not the same as a sediment trap (see Section 408.2).** Sediment traps are necessary to protect appliance gas controls from the dirt, soil, pipe chips, pipe joint tapes and compounds and construction site debris that enter the piping during storage, handling, installation and repairs. Hazardous appliance operation could result from foreign matter entering gas controls and burners. Despite the fact that utilities supply clean gas, foreign matter can enter the piping prior to and during installation both on the utility side of the system and on the customer side.

Sediment traps are designed to cause the gas flow to change direction 90 degrees (1.57 rad) at the sediment collection point, thus causing the solid or liquid contaminants to drop out of the gas flow. [see Figure 408.4(1)].

The nipple and cap should not be placed in the branch opening of a tee fitting because this would not create a change in direction of flow and would allow debris to simply pass/jump over the capped nipple collection point. Figure 408.4(2) illustrates a relatively ineffective sediment trap; however, such configurations are not expressly prohibited by the wording of this section. The text speaks of the bottommost opening of the tee without prohibiting such opening from being the branch opening. Note that Figure 408.4 illustrates the intent to have the nipple and cap in the run of the tee, thereby suggesting that it is not the intent to have it in the branch of the tee. The code does not specify a minimum length for the capped nipple; therefore, it could be from a close nipple on up. Three to six inches is the customary length. The capped nipple must be in a vertical plane to allow the sediments to fall in by gravity. The sediment trap must be as close to the appliance inlet as practical to be able to capture sediment from all of the piping upstream of the appliance connection. The sediment trap must be downstream of the appliance shutoff valve to allow the trap to be serviced after closing the upstream shutoff valve. Manufactured sediment traps are available that have the configuration of a straight section of pipe and are equipped with cleanout openings. Although it would be wise to install sediment traps at all appliance connections, they are not mandated by code for gas lights, ranges, clothes dryers, decorative vented appliances for installation in vented fireplaces and outdoor grills. These exempt appliances are also susceptible to harm from debris in gas, and the appliance manufacturer's instructions often require sediment traps where the code does not. The code's logic is that these exempt appliances are manually operated rather than automatically operated; therefore, the user would be in attendance and aware of a problem.

ARKANSAS PLUMBING LICENSES ARE GOING DIGITAL

The new Licensing Portal was engaged earlier this month. So far, we have about two hundred users on board.

Plumbers, Gas Fitters, Municipal Inspectors Backflow Techs and Restricted Plumbers. Be advised, this is how you will be applying, renewing and reinstating. And how you will pay and receive a digital license. No more waiting for the mail or lost renewals and licenses. The link and User Guide can be found on the Arkansas Department of Health's Plumbing and Natural Gas webpage. https://healthy.arkansas.gov/programs-services/licensing-military-member-licensure-permits-plan-reviews/plumbing-natural-gas-health-code/

Or use the QR Code

You will need to set up a profile; email addresses will be required. We also still require that "Applicants" complete an application and upload it to the portal for signatures and other information. Most applications still require Committee Review and examination.

NATURAL GAS REGULATOR INSTALLATION AND USE

A line pressure regulator shall be installed where the appliance is designed to operate at a lower pressure than the supply pressure. On occasion it is necessary to install a pressure regulator on the natural gas piping system; generally the regulator is installed at the meter and low pressure is supplied to the appliances from that point. At times the meter connection may be at a location away from the structure being served and the regulator is installed at the entrance to the building, and in other cases a regulator may be installed at each gas appliance served.

Section 410 Flow Controls outlines the rules and regulations pertaining to the installation of gas regulators. First always check the regulator to see if it is capable of supplying enough gas for the project, regulators are rated in terms of capacity of flow in cubic feet per hour (cfh). Regulator capacities may vary depending on the use, the capacity of a regulator serving a single appliance may differ from that same regulator serving multiple appliances, and the supply pressure is a factor as well. Always obtain the regulator capacities and the manufacturer's installation instructions before installing a natural gas regulator.

Venting of the regulators is an important factor to consider when determining regulator placement. When regulators are installed outside care should be taken not to install them areas where the vent from the regulator could be pulled into the structure. If it is not possible to isolate the regulator from an intake opening into the structure or the ventilation air intake of the HVACR equipment the regulator vent may be piped away from the opening to a safe distance before termination. The vent shall be designed to prevent the entry of insects, water and foreign objects, additionally the vent piping shall be of approved material. When regulators are installed indoors; regulators requiring a vent shall be vented directly to the outdoors, a vent to the outdoors is not required for regulators equipped with and labeled for utilization with an approved vent-limiting device installed in accordance with the manufacturer's instructions.

GAS METER PLACEMENT

Section 401.1.2 Meter Location accessible and acceptable. States in part that, "Location, space requirements, dimensions and type of installation shall be acceptable to the gas company." The local gas company has the authority to determine where the consumer meter is to be placed and what type of piping arrangement is acceptable. In most cases the local gas company has placement requirements that include a distance of the meter and regulator placement from any source of spark or ignition. The local gas company should be contacted to determine their requirements.