

NEW AND ALTERATIONS TO COMMERCIAL GAS PIPING SYSTEMS

Montgomery County Building Regulations

451 West Third St, 10th Floor Dayton, OH 45422

Phone: 937-225-4622 Fax: 937-225-6327

PROJECT SUCCESS CHECKLIST

The State of Ohio regulates all commercial construction, and certifies local building departments, such as ours, to enforce its codes at the local level. We enforce the Ohio Building Code for all commercial, industrial, and multi-family residential new construction, alterations, and changes in the ways buildings are used. This makes sure all buildings in our state comply with minimum standards for structural and fire safety, and standards for health and welfare.

APPLICALE CODES

2024 Ohio Building Code (OBC)
2024 Ohio Existing Building Code (OEBC)
2024 Ohio Fire Code (OFC)
2024 Ohio Mechanical Code (OMC)
2024 Ohio Plumbing Code (OPC)
2021 International Fuel Gas Code (IFGC)

2017 National Fire Protection Association 58 Liquid Petroleum Gas Code

2023 National Fire Protection Association 70 National Electric Code (NEC)

CONSTRUCTION DOCUMENTS

- 1. Submit construction documents prepared and sealed by Registered Design Professional. This requirement may be waived by the building official if the exception to IFGC Section 107.1 is applicable.
- 2. Complete submittals shall include the following in accordance with OBC Section 106.2.1 and IFGC Section 107.1:
 - a. Plan or isometric (*drawn to scale*) indicating entire path of fuel-gas distribution from point of delivery (gas meter). Identify sizes and lengths of pipe, indicate all gas appliances served and gas demand of each appliance, indicate material of proposed fuel-gas piping.
 - b. Site plan to be provided showing underground gas piping if gas meter is located away from the building or a propane tank is used for fuel-gas service.
 - c. Indicate method of pipe-sizing in accordance with IFGC Section 402.3.
 - d. Construction documents shall include the following in accordance with IFGC Section 402.4. This information is located on each pipe sizing table (Tables 402.4(1) through 402.4(37)).
 - 1) Type of fuel gas proposed for use.
 - 2) Inlet pressure
 - 3) Pressure-drop
 - 4) Specific gravity at fuel-gas point of delivery
 - e. Indicate gas-piping support in accordance with IFGC Section 407.1.
 - f. Provide gas piping protection from corrosion (i.e. exposed piping installed on the exterior) in accordance with IFGC Section 404.11.
 - g. Indicate locations and details of sediment traps, shutoff-valves, and flow controls at each appliance in accordance with IFGC Sections 408, 409 and 410.
- 3. Provide schedule of new and existing appliances indicating the BTU/H input of each appliance and total gas load for system.



4. Additional information may be required during the plan review.

SYSTEM REQUIREMENTS

- 1. Fuel-gas piping shall be protected from corrosion in accordance with IFGC 403.7 and 404.11.
- 2. Piping system installation as applicable to the following shall comply with IFGC 404:
 - a. Piping located in concealed locations shall feature fittings listed for concealed locations in accordance with IFGC Section 404.5.
 - b. Above-grade outdoor piping shall be elevated min. 3½" in accordance with IFGC Section 404.9.
 - c. Underground outdoor piping shall comply with IFGC 404.10 through 404.12.
 - d. Provide tracer wire if plastic pipe is used for underground piping in accordance with IFGC 404.17
- 3. Fuel-gas piping bends / changes in direction shall comply with IFGC 405.
- 4. Provide shut-off valves in accordance with IFGC 409.
- 5. Flow controls shall comply with IFGC 410.
- 6. Provide piping support (horizontal and vertical) in accordance with IFGC 415.
- 7. 24-hour pressure test required at 20-lbs. above ground and 50-lbs underground with Kuhlman Gauge in accordance with IFGC Section 406.1.
- 8. Underground piping shall be protected from corrosion in accordance with IFGC Sections 404.8 and 404.9.