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#### 16.01 INSPECTOR

All references to the inspector in this chapter mean the building/plumbing inspector of the City of Wisconsin Rapids.

#### 16.02 CONFORMING TO CODE; AUTHORITY TO DISCONNECT

The inspector shall order and the gas utility is hereby authorized to disconnect any gas appliances or gas piping which shall be found not to conform to the requirements of this ordinance, or which may be found defective and in such condition as to endanger life and property. Where such disconnection has been made, a notice shall be attached to such appliance or gas piping which shall state that the same has been disconnected, together with reason therefor, and the signature and official capacity of the person making the disconnection, and such notice shall not be removed nor shall the appliance or gas piping be reconnected until authorized by the department having jurisdiction to do so. The owner and/or occupant of the premises shall be immediately notified of the disconnection and reason therefore.

#### 16.03 INSPECTIONS

- (1) Upon completion of installation of gas space heating equipment and prior to the use thereof, the building inspector and the gas utility shall be notified that such gas space heating equipment is ready for inspection.
- (2) The inspector is hereby authorized and directed to enforce all of the provisions of this ordinance, and the inspector or his authorized representative, upon presentation of proper credentials, may enter any building or premises for the purpose of making inspection or preventing violations of this ordinance.
- (3) The inspector shall issue a certificate of approval at the completion of the work for which a specific permit has been issued, if, after inspection it is found that such work complies with the provisions of this ordinance and all other requirements of law or ordinance applicable thereto. A duplicate of each piping certificate shall be delivered to the gas company.
- (4) For the purposes of enforcing provisions of this section, the inspector shall make inspections once each year of all public buildings and business establishments. He shall at the request of the fire chief accompany him or his representative to inspect a suspected violation and shall take steps to bring the installation up to standards covered in this code.

#### 16.04 ACCESSIBILITY

Gas equipment shall be so constructed and installed in such locations as to be readily accessible for adjustment, cleaning, removal, and replacement of parts and for the performance of all maintenance and service work.

#### 16.05 NON-LIABILITY OF CITY

This chapter shall not be construed as imposing upon the City of Wisconsin Rapids any liability or responsibility for damages to any person injured by any defect in any gas piping or appliance mentioned herein, or by installation thereof, nor shall the City of Wisconsin Rapids or any official or employee thereof be held as assuming any such liability or responsibility by reason of the inspection authorized hereunder or certificate of inspection issued by the inspector.

#### 16.06 PERMITS REQUIRED

- (1) It shall be unlawful for any person to install, or cause to be installed, any space heating equipment, including controls, piping duct, and vent connections without obtaining from the City a permit to do so; except that no permit or license shall be required for work defined as "minor repairs". Minor repairs are hereby defined as adjustments of appliances, replacement of parts, repairing leaks, and similar work. The applicant shall contact the gas utility to determine if gas in sufficient quantities is available at the location to be served before applying for the permit.
- (2) Permit Application. At the time of application for a permit, the following information shall be provided by the persons or contractor making the application:
  - (a) Maximum hourly BTU input rating of equipment
  - (b) Type of equipment: Room heater, furnace, boiler, unit heater etc.
  - (c) Heating medium: Air, steam, water, or other.
  - (d) Type of circulation: Gravity, forced, or other.
  - (e) Name of manufacturer of equipment.
  - (f) Whether or not the appliance to be installed is listed as accepted by a nationally recognized testing agency such as the American Gas Association Inc. Laboratories or Underwriters' Laboratories, Inc.
- (3) Fees. Fees are as set forth in the Building Code of the City of Wisconsin Rapids.
- (4) Temporary Use. When temporary use of gas is desired, the City may grant a permit for such use for a period of not to exceed 90 days, provided that the gas piping which is desired to be used be given a test equal to that required as a final inspection. The test pressure should be at least 2 times the operating pressure and should show no pressure loss in a minimum time of 15 minutes.
- (5) Installation by Owner. The permit or permits required by this code may be issued to any person to do any construction or work regulated by the code in a single family dwelling used exclusively for living purposes, including the usual accessory buildings and quarters in connection with such buildings, in the event that such a person is a bona fide owner of such dwelling and accessory building and quarters, and that the same are occupied by or designed to be occupied by said owner, provided that the owner shall personally purchase all material and shall personally perform all labor in connection therewith. An owner-constructed installation shall be subject to the same standards and tests as required of a dealer's or contractor's installation.

#### 16.07 SAFETY DEVICES

- (1) A boiler or furnace shall be equipped with approved safety devices installed in accordance with manufacturer's instructions and arranged to limit high steam pressure or water temperatures or high air temperatures in warm-air furnaces. Each steam boiler shall be equipped with low water cut-off. The safety devices to be used shall be such as to cut off the gas supply to the burners in case of excessively high air, water, or steam temperatures or low water supply.
- (2) If the firing door of a furnace or boiler is equipped with a positive locking device to keep the door closed, the device shall be removed or altered so that abnormal pressure on the inside of the combustion chamber will cause the door to open; however, this shall be done in such a manner that the door is closed tightly during normal operation of the furnace and burner.

#### 16.08 CONVERSION - VENTING

Gas vent connection on all conversion installations, including the draft hood, shall be sized according to dimensions listed in tables as approved by the American Standards Association as shown in manual ASA Z21.30-Current.

#### 16.09 GAS EQUIPMENT

All gas equipment installed on any premises shall be substantial and durable construction and shall be designed and installed pursuant to processes and methods reasonably adequate to assure safe and efficient operation.

#### 16.10 STANDARDS - EQUIPMENT AND PIPING

Gas equipment and gas piping which meets the minimum requirements for the safe installation and performance of gas equipment and gas piping conforming to the current standards of the following nationally recognized authorities herein named, shall be conclusively deemed to meet the minimum requirements of this ordinance, to-wit: American Gas Association, American Standards Association manual "Installation of Gas Piping and Gas Appliances in Buildings, ASAZ21.30-Current", and National Board of Fire Underwriters except as further provided in this ordinance.

#### 16.11 GAS METER LOCATIONS

- (1) A meter location, approved by the gas utility, shall be provided as close as practicable to the point where the gas service piping enters the building.
- (2) The location shall be such that the meter, meter connections, gas service piping tee, and gas service piping shut-off valve are exposed and readily accessible for inspection, installation, replacement, removal, locking and unlocking, and reading.
- (3) Gas meters shall not be placed where the meters would likely be subject to damage, such as in halls, coal bins, public passage ways, over doors, or in locations subject to dripping water or unusual moisture conditions.
- (4) Where more than one meter is supplied through one service line, a stop cock shall be installed at each meter outlet.

#### 16.12 PIPING

- (1) Piping shall be wrought iron, steel, or approved tubing.
- (2) Pipe joints may be screwed, flanged, or welded.
- (3) Cast iron fittings shall be prohibited.
- (4) For operating pressures of 125 p.s.i. or less, pipe and fittings shall be designed for a pressure of at least 125 pounds per square inch gauge.
- (5) All gas service and house piping shall be of the sizes required to supply the number of outlets and shall not be less than that recommended by the gas utility for the appliances served.
- (6) All gas piping or tubing inside buildings must be securely strapped to joists or ceiling with iron straps or approved wire hangers. No hangers made of nails or wood will be permitted.
- (7) The use of bushings in any house or yard line or the use of unions in concealed location is prohibited.
- (8) All gas outlets shall extend through the floor or base board not less than two and one-half (2-1/2") inches.
- (9) It shall be unlawful to remove or disconnect any gas equipment without capping or plugging with a screwed joint fitting the outlet from which the gas equipment was removed. All outlets to which gas equipment is connected shall be left capped or plugged gas tight.
- (10) Each consumer's service line shall be provided by the consumer with a suitable stop cock located in an accessible place at the outlet of the meter.
- (11) When two or more gas meters are installed on the same premises but supply separate customers, the house-piping system shall not be interconnected.
- (12) The practice of using any gas pipe as a ground for electrical purposes for radio, telephones, etc., is prohibited, and such connections, if any, will be disconnected immediately upon discovery and without notice.
- (13) In multiple meter installations and in installations having more than one house-piping system supplied by the same gas meter. Each separate house-piping system shall be plainly identified by the installer by attachment of a metal tag indicating the number of house-piping systems at the meter location. This should be checked for compliance at the time of the final inspection.

#### 16.13 AIR FOR COMBUSTION

Appliances shall be installed in a location where there is enough ventilation to satisfy combustion requirements of the appliance. If adequate air is not available due to confined area or tightly closed room, outside air shall be admitted through a vent opening or duct.

#### 16.14 ROOM OR SPACE HEATERS

- (1) Any room or space heater shall be installed in such a manner as to protect the surrounding combustible material by having adequate clearance to provide air circulation with a minimum clearance of 6" or as otherwise recommended by the manufacturer.
- (2) Wall-type heaters shall not be installed in walls of combustible material unless specifically approved.

#### 16.15 VENTING

- (1) Appliances shall be flue-connected or otherwise vented to carry off the products of combustion in accordance with the following:
  - (a) Any domestic appliance with input rating in excess of 50,000 BTU per hour as well as any appliance that is provided with a vent opening.
  - (b) Any appliance with an input rating of over 5,000 BTU per hour, if this rating exceeds 30 BTU per hour per cubic foot of room space.
  - (c) All space heaters, steam, hot water boilers, and hot air furnaces, floor furnaces, recessed heaters, unit heaters, duct furnaces, and hot water heaters.
  - (d) Gas-fired incinerators shall be vented.

#### 16.16 AUTHORITY TO TURN ON GAS

- (1) It shall be unlawful for any person, firm, or corporation excepting an authorized agent or employee of a person, firm, or corporation engaged in the business of furnishing or supplying gas and whose service pipes supply or connect with the particular premises to install, extend, repair, alter, or open any portion of the service piping, to remove or install a gas meter, or turn on or reconnect gas service in or on any premises provided, however, that the gas service piping valve contained within the building may be closed for emergency reasons; or may be closed and later reopened for the purpose of altering or repairing any portion of the house-piping system where and when gas service, at the time is being furnished and provided that the requirements listed in Section 16.18 below be followed at the time the gas service piping valve is closed and reopened.
- (2) It shall be unlawful to turn on or supply gas to house piping at any premises unless at least one gas appliance is connected to the gas piping system and all outlets are properly and securely connected to gas appliances or capped or plugged with screw joint fittings.

#### 16.17 TESTING OF SERVICE

- (1) Prior to closing the gas service piping valve, (except in emergency to stop leaking gas,) all pilot and burner valves of all gas equipment connected to the house-piping system shall be closed and the gas meter test hand shall be observed for a sufficient length of time to make sure that there is no gas passing through the meter. If the gas meter test hand shows movement, the house-piping system and all gas equipment supplied by the meter shall be inspected and the necessary steps be taken to prevent the passage of gas through the meter before gas service valve is closed.
- (2) At the time the gas service piping valve is reopened, the gas meter test hand shall be observed for a sufficient length of time to make sure that no gas is passing through the meter. If the gas meter test hand shows movement, the house-piping system and all gas equipment supplied by the gas meter shall be inspected immediately to locate the gas leak. The gas service piping valve shall be closed until necessary repairs have been made, after which the test specified by this paragraph shall be repeated.
- (3) If, after observation of a sufficient length of time, the gas meter test hand does not show movement, the house-piping system shall be purged of air and all burners of all gas equipment connected to the house-piping system shall be lighted and gas permitted to burn for a sufficient length of time to make sure that the house-piping system and gas equipment have been completely purged. Purging shall be done to the outside wherever possible and shall be done in a safe manner to prevent the accumulation of gas within the dwelling.

#### 16.18 LEAK TESTS

- (1) Leaks in gas piping shall be located by applying soapy water, oil, or some suitable solution to the exterior of the piping.
- (2) Fire or acid shall not be used to locate leaks, nor shall water be introduced into the gas piping.
- (3) It shall not be permissible to repair defects in gas pipes or fittings, but after having been located, the defective pipe or fittings shall be removed and replaced with sound pipe or fittings.
- (4) Test made by the installer and final piping inspection by the inspector shall be made after all piping authorized by the permit has been installed and before any fixtures or gas appliances have been attached hereto. This inspection shall include an air pressure test at which time the piping shall stand an air pressure equal to 2 times the anticipated operating pressure but not less than 10 pounds PSI gauge and the piping shall hold this air pressure for a period of at least 15 minutes without any perceptible drop. A U-gauge type mercury column or approved type of indicating pressure gauge shall be used for the test.