

- I. Install grease interceptors, including trapping, venting, and flow-control fitting, according to Authorities Having Jurisdiction and with clear space for servicing.
    - 1. Install cleanout immediately downstream from interceptors not having integral cleanout on outlet.
    - 2. Connect inlet and outlet to unit, and connect flow-control fitting and vent to unit inlet piping. Install valve on outlet of automatic drawoff-type unit.
  - J. Install traps on plumbing specialty drain outlets. Omit traps on indirect wastes unless trap is indicated.
  - K. Install escutcheons at wall, floor, and ceiling penetrations in exposed finished locations and within cabinets and millwork. Use deep-pattern escutcheons if required to conceal protruding pipe fittings.
- 3.6 PIPE FREEZE PROTECTION
- A. Install heating cable at locations shown on drawings for pipe freeze protection.
  - B. Cut heating cable to length required for pipe lengths and watt per foot requirements. Secure to pipe and install in accordance with manufacturer's published instructions.
- 3.7 CLEANING AND DISINFECTION
- A. Clean and disinfect potable domestic water piping as follows:
    - 1. Purge new piping and parts of existing piping that have been altered, extended, or repaired before using.
    - 2. Use purging and disinfecting procedures prescribed by Authorities Having Jurisdiction. If methods are not prescribed, use procedures described in AWWA C651 or follow procedures described as follows:
      - a. Flush piping system with clean, potable water until dirty water does not appear at outlets.
      - b. Fill and isolate system according to either of the following:
        - 1) Fill system or part thereof with water/chlorine solution with at least 50 ppm of chlorine. Isolate with valves and allow to stand for 24 hours.
        - 2) Fill system or part thereof with water/chlorine solution with at least 200 ppm of chlorine. Isolate and allow to stand for three hours.
      - c. After the standing time, flush system with clean, potable water until the chlorine is purged from the system.
  - B. Submit water samples in sterile bottles to Authorities Having Jurisdiction. Repeat procedures if biological examination shows contamination.
  - C. Reports: Prepare disinfection reports signed by the Authority Having Jurisdiction and submit to Architect with Closeout Submittals.
- 3.8 FIELD QUALITY CONTROL
- A. Pipe Tests:
    - 1. Test plumbing drainage systems under 10 foot static head for a period of not less than 24 hours.
    - 2. Test water systems under 150 psig hydrostatic pressure.
    - 3. Test underground piping prior to backfilling and before installing equipment and before insulation is applied, using specified methods and conditions. Subject piping to test for not less than 24 hours. Make necessary replacements or repairs and repeat tests until entire system, including equipment, is accepted as satisfactory.
    - 4. Pressure test PEX piping systems in accordance with the manufacturer's requirements. Do not exceed 150 psig.
    - 5. Pressure test PP piping in accordance with manufacturer's Installation Manual.
    - 6. Install equipment, operate systems, clean out scale, dirt, oil, waste, and foreign matter, and correct additional leaks.
    - 7. Test each reduced-pressure-principle backflow preventer and double-check backflow-prevention assembly according to Authorities Having Jurisdiction and the device's reference standard.
    - 8. Pipe tests specified in this Section shall be to five feet outside building lines or to point of connection to exterior lines. Drains to oil/grease interceptor (separator) shall be tested to the point of the oil/grease interceptor outlet.