

# UCG Commander Series™ Commercial Installation Checklist

**Important - Read the Installation and Operation Manual before installing and operating this water heater.**

- **Product Handling** - Carefully uncrate the water heater. Move the water heater in place with a hand truck (**do not use the venting pipes for handles**). This water heater is suitable for installation on combustible flooring. Do not install the water heater directly on carpeting.
- **Electrical Requirements** - Make sure there is a dedicated (120V) line voltage and that the polarity is correct. A proper ground is required for this water heater. All electrical wiring and connections must be in accordance with local codes, the National Electric Code (NFPA-70 – latest edition) or in Canada the Canadian Electrical Code (CSA C22.1 – latest edition).
- **Venting Requirements** - This is an atmospheric vent unit. The venting system must be installed properly following all local codes. In the absence of local codes comply with the National Fuel Gas Code (NFPA-54/ANSI Z223.1 - latest edition). In Canada comply with the Natural Gas and Propane Installation Code (CAN/CGA B149.1-00 - latest edition). Failure to properly install the venting system could result in property damage, personal injury, or death.
- **Air Intake Ducting Maximum Lengths** - All air intake ducting must stay within the required maximum and minimum length and diameter. **See the Installation and Operation Manual for proper intake ducting length and diameter tables.** Proper support of the intake pipe is required (every (5.0 ft) (1.5 m) vertical and (3.0 ft) (0.9m) horizontal).
  - Record the Intake Ducting Length: \_\_\_\_\_
  - Record the Intake Ducting Diameter: \_\_\_\_\_
- **Gas Requirements** - Use the proper gas piping size for this water heater. (¾ inch) (1.9 cm) NPT or equivalent is required for models (300,000 btu/hr) (87.8 kw) or less. (1.0 inch) (2.5 cm) NPT or equivalent is required for the (399,000 btu/hr) (116.8 kw) models. Install a properly sized regulator to supply an adequate volume of gas. A minimum of (7.0 inch WC) (1.74 kPa) gas pressure is required when the water heater is operating. Gas pressure must stay below (14.0 inch WC) (3.48 kPa) when the unit is not operating. The pressure drop between non-operating and operating pressures should be less than (3.0 inch WC) (0.75 kPa). The gas supply lines must meet all requirements of the National Fuel Gas Code (NFPA-54/ANSI Z223.1 - latest edition). In Canada comply with the Natural Gas and Propane Installation Code (CAN/CGA B149.1-00 - latest edition).
  - Record the Rating Plate Manifold Pressure: \_\_\_\_\_
  - Record the Rating Plate Gas Type: \_\_\_\_\_
  - Record the Measured Gas Pressure: \_\_\_\_\_
  - Record the Pressure Drop Between Non-Operating and Operating Pressure: \_\_\_\_\_
- **Service / Mechanical Room** - Provide adequate space for servicing the water heater. See the Installation and Operation Manual for specific details. A minimum of (18.0 inch) (45.7 cm) overhead room is required to remove the anode rods for servicing.
- **Combustion Air Supply** - Provide an adequate air supply for combustion and ventilation. An insufficient supply of air will cause recirculation of combustion products resulting in contamination that may be hazardous to life. **The flow of combustion and ventilating air must not be obstructed.** See the Installation and Operation Manual for specific details.

**For more detailed information, read the Installation and Operation Manual provided with this water heater. Also consult local, NFGC and NEC codes.**

**Questions? Contact Bradford White Technical Service at (800) 334-3393.**