#### **SECTION 15423**

# **ELECTRIC WATER HEATER**

#### PART 1 - GENERAL

#### 1.1 DESCRIPTION

- A. Work Included: Furnish and install electric water heater(s) and appurtenant work as shown on the Drawings and/or as directed by the Engineer.
- B. Related Work Specified Elsewhere: "Plumbing General" is specified in this Division.

### 1.2 QUALITY ASSURANCE

- A. Acceptable Manufacturers:
  - 1. Rudd/Rheem
  - 2. A.O. Smith
  - 3. Hatco
  - 4. Ariston
  - 5. State
  - 6. Or approved equal.

#### 1.3 GUARANTEE

- A. Floor mounted water heater shall have a 3 year non-prorated guarantee of tank against leakage.
- B. Point-of-use under-sink water heater shall have a full two year guarantee of tank against leakage and 1 year guarantee of all other component parts.

## 1.4 SUBMITTALS TO THE ENGINEER

- A. Submit full water heater description data.
- B. Submit installation and operation instructions.
- C. Submit manufacturer's warranty.
- D. Make submittals in accordance with Section 01340.

### PART 2 - PRODUCTS

# 2.1 MATERIALS

- A. Floor Mounted Water Heater:
  - 1. Heating Element(s): Immersion electric type, nichrome wire embedded in insulation and sealed in seamless copper tubing.
  - 2. Tank: High carbon steel with glass lining or in the case of State water heaters "Duron" coating suitable for 150 psi working pressure.
  - 3. Top or side hot water outlet.
  - 4. Enameled sheetmetal enclosure with fiberglass insulation.

- 5. Magnesium anode rod (replaceable).
- 6. Surface mounted thermostat (adjustable).
- 7. Furnish any contactors and controls required for operation.
- 8. Hi-limit safety cut-out.
- 9. Pressure and temperature relief valve sized to meet or exceed the heating capacity of the heat element.
- 10. Vacuum relief valve sized to accommodate capacity of water heater.
- 11. UL approved.
- 12. Size, capacity, and electrical characteristics as indicated on the Drawing.
- 13. Cold water inlet shall be equipped with a dip tube designed to release incoming cold water low in the tank.

## PART 3 - EXECUTION

## 3.1 INSTALLATION

- A. Install the water heater(s) in strict accordance with the manufacturer's instructions and recommendations.
- B. Install the water heater(s), piping, and wiring in accordance with all applicable local and State codes.
- C. Provide a drain valve on tank.
- D. Pipe the discharge from the relief valve to a floor drain, or a point 6 inches above floor.

## **END OF SECTION**