

DOMESTIC WATER HEATERS 15480 – 1

SECTION 15480 - DOMESTIC WATER HEATERS

PART 1 – GENERAL

1.1 SUMMARY

- A. This Section includes the following domestic water heaters:
 - 1. High efficiency gas-fired

1.2 SUBMITTALS

- A. Product Data: For each type and size of water heater indicated. Include rated capacities, operating characteristics, furnished specialties, and accessories.

1.3 QUALITY ASSURANCE

- A. Source Limitations: Obtain same type of water heaters through one source from a single manufacturer.
- B. Product Options: Drawings indicate size, profiles, and dimensional requirements of electric water heaters and are based on the specific system indicated.
- C. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- D. ANSI Z21.10.3 Test Standard for Water Heaters.
- E. Comply with NSF 61, "Drinking Water System Components - Health Effects; Sections 1 through 9," for all components that will be in contact with potable water.

1.4 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of electric water heaters that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Structural failures including storage tank and supports.
 - b. Faulty operation of controls.
 - c. Deterioration of metals, metal finishes, and other materials beyond normal use.
 - 2. Warranty Period(s): From date of Substantial Completion:
 - a. Three Years

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PART 2 – PRODUCTS

2.1 MANUFACTURERS

A. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:

1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, manufacturers specified.

2.2 GAS-FIRED WATER HEATERS

A. Available manufacturers include Lochinvar TNR Series or equal.

1. Construction: Copper piping or tubing complying with NSF 61 barrier materials for potable water
 - a. Connections: ASME B1.20.1 pipe thread.
 - b. Pressure Rating: 150 psig.
 - c. Electronic ignition system.
 - d. Sealed combustion
 - e. Safety Control: High-temperature-limit cutoff device or system.
 - f. Jacket: Heavy gauge steel with acrylic enameled finish.
3. Support: As necessary to support full weight while in operation.
4. Capacity and Characteristics: As scheduled on drawings.
5. Temperature Control: Unit mounted.

PART 3 – EXECUTION

3.1 WATER HEATER INSTALLATION

A. Install water heaters level and plumb, according to manufacturer and referenced standards. Maintain manufacturer's recommended clearances. Arrange units so controls and devices needing service are accessible.

3.2 CONNECTIONS

- A. Piping installation requirements are specified in other Division 15 Sections. Drawings indicate general arrangement of piping, fittings, and specialties.
- B. Install piping adjacent to water heaters to allow service and maintenance. Arrange piping for easy removal of water heaters.

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3.3 FIELD QUALITY CONTROL

- A. Perform the following field tests and inspections and prepare test reports:
1. Leak Test: After installation, test for leaks. Repair leaks and retest until no leaks exist.
 2. Operational Test: After electrical circuitry and gas system has been energized, confirm proper operation.
 3. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

END OF SECTION 15485