

SECTION 15450

PLUMBING EQUIPMENT

PART 1 - GENERAL

1.1 WORK INCLUDED

- A. Water heaters.
- B. Pumps.

1.2 REFERENCES

- A. ANSI/ASME Section 8D: Pressure Vessels.
- B. ANSI/NFPA 70: National Electrical Code.

1.3 QUALITY ASSURANCE

- A. Provide pumps with manufacturer's name, model number, and rating/capacity identified.
- B. Ensure products and installation of specified products are in conformance with recommendations and requirements of the following organizations:
 - 1. National Sanitation Foundation (NSF).
 - 2. American Society of Mechanical Engineers (ASME).
 - 3. Underwriters Laboratories (UL).
- C. Ensure pumps operate at specified system fluid temperatures without vapor binding and cavitations, are non-overloading in parallel or individual operation, operate within 25 percent of midpoint of published maximum efficiency curve.

1.4 SUBMITTALS

- A. Submit shop drawings and product data.
- B. Include dimensions drawings of water heaters indicating components and connection to other equipment and piping.
- C. Indicate pump type, capacity, power requirements, and affected adjacent construction.

1.5 WARRANTY: Warranty: Include coverage of domestic water heaters and in-line circulator.

PART 2 - PRODUCTS

2.1 IN-LINE CIRCULATOR PUMPS

A. Manufacturer and Model Number:

1. Grund for UPS-15-42-F.
2. Bell & Gossett - LR20.

B. Casing: Bronze, or Stainless Steel; rated for 125 psig working pressure.

C. Impeller: Bronze or Stainless Steel.

D. Shaft: Alloy steel with integral thrust collar and two oil lubricated bronze sleeve bearings.

E. Seal: Carbon rotating against a stationary ceramic seat.

F. Drive: Flexible coupling.

PART 3 - EXECUTION

3.1 WATER HEATER INSTALLATION

A. Install water heaters in accordance with manufacturer's instructions.

B. Coordinate with plumbing piping and related work to achieve operating system.

3.2 PUMP INSTALLATION

A. Install in accordance with manufacturer's instructions.

B. Provide air cock and drain connection on horizontal pump casings.

C. Provide line sized gate valve and strainer on suction and line sized soft-seated check valve and globe valve on discharge.

END OF SECTION