

23 - Boiler Specifications

A. Term

a. Standard five-year preventative maintenance agreement designed to extend equipment life, starting on the date of the initial maintenance.

B. Work Included

a. Boiler Work includes all labor, materials, equipment, and services necessary to complete the boiler installation, repair, or maintenance as specified herein.

C. Submittals

- a. Product data including capacities, sizes, performances, operations, safety features, finishes, and similar information.
- b. Shop Drawings: If applicable:
- c. Operations and Maintenance Data: Provide the following.
 - i. Complete information on emergency, operation, care, maintenance, and adjustment data on repair and replacement parts.
 - ii. Include diagnostic and repair information available to manufacturers and installers maintenance personnel.
 - iii. Name, address, and phone number of local representatives for each manufacturer.
 - iv. Copy of warranties including appropriate reference numbers for manufacturers to identify project.
- d. Provide 3 business days for review and approval of submittals. Contractor warrants by submitting a submittal that the submitted item is compatible with the existing system. Any prior approval of an alternate system does not exempt the supplier from meeting the intent of these specifications. If the alternate system fails to provide all the requirements specified in this document, the Contractor shall be responsible for all costs associated with the removal and replacement of said equipment.
- e. All submittals shall be provided to 2021MaintenanceRFP@hopeci.org..
- f. Contractor shall maintain and provide Technician Report noting all examinations, callbacks, and repairs.

D. Quality Assurance

- a. Contractor must consider equipment type, component life, equipment usage, and building environment to plan maintenance activities in advance.
- b. Single Source: Equipment furnished under the terms of this specification shall be the standard product of a single manufacturer.
- c. Coordination of Work: Ensure compatibility of total systems.

- d. Contractor: A firm with not less than 5 years of successful experience in boiler installation or maintenance.
- e. Service Personnel: Qualified, skilled, and experienced tradesmen in boiler service and repair with record of successful in-service performance for installing boiler similar in quantity, type, quality to that indicated for this Project.
- f. Warranty: Manufacturer warranty for a replaced part for the duration of its life expectancy, a minimum of five years. Labor warranty for the replaced part for a period of at least one year. The Contractor's warranty covers defective material and workmanship.
- g. Boilers must fire optimally (low, medium, and high fire).
- h. If during the term of this contract, due to lack of proper maintenance by the Contractor, the boiler becomes unserviceable, the Contractor must cover the cost to replace or repair.

E. Job Conditions

a. Contractor shall perform all the work, which may be required to remove violations or to comply with recommendations of public administrative agencies or departments and casualty companies resulting from normal wear. It is understood that the Contractor had ample time to check the Department of Buildings and the Plumbing Division for existing violations, and that this cost is included within the yearly maintenance service.

F. Delivery and Storage

- a. Deliver, store, and handle materials, components, and equipment in original, new, and unopened packages and containers bearing manufacturer's name and label.
- b. Store materials, components, and equipment off ground, under cover, and in a dry
- c. Promptly replace products damaged during shipping.
- d. Maintain manufacturer recommended environmental conditions throughout storage and installation periods.
- e. Provide secure lock-up for products delivered to Project, but not yet installed. Control handling and installation of items so that completion of Work will not be delayed by losing material both before and after installation.
- f. Handle materials in manner to avoid damage, marring, or scratching. Correct, replace, or repair products damaged during Work.

G. Materials

- a. Subject to approval, Contractor may provide products by the following manufacturers:
 - i. WEIL McLean or
 - ii. Equivalent
- b. Maintain a supply of frequently used replacement parts and components required for routine maintenance and restoration of service following a minor shutdown.
- c. Maintain or have an immediate access to a supply of major spare parts, for temporary use in an emergency. Major lending parts shall be at a location from which the Contractor can secure them as quickly as possible but not to exceed overnight shipping.
- d. Replacement parts furnished under this Agreement shall be original equipment manufactured or if unavailable specifically selected to ensure compatibility with the existing boiler parts, components, and equipment. All replacement parts shall be new.

H. Safety

- a. Furnish and install using safety methods and equipment to comply with the applicable Federal, State, and local laws and regulations.
- b. Contractor is responsible to ensure potential impact of electrical work on the installers and on others involved in and adjacent to the work zone.
- c. Contractor to conform to the most stringent guidance of the applicable manufacturer's Material Safety Data Sheets or local regulations.
- d. Take necessary precautions to protect personnel and property from hazards due to fails, injuries, toxic fumes, fire, explosion, or other harm.

I. Inspection

- a. Examine areas and conditions of work and notify HOPE Community Inc. in writing of conditions detrimental to proper installation and maintenance. Proceed with work after unsatisfactory conditions have been corrected.
- b. Starting of boiler maintenance work will be construed as Contractor's acceptance of surfaces and conditions within any area.
- c. The Contractor shall perform an annual BO-9 inspection report and filing, as required by the Department of Buildings.
- d. The Contractor shall perform tri-annual boiler inspection report and filing as required by Department of Environmental Protection and Department of Buildings.
- e. If a boiler is replaced, it must be mounted on housekeeping pad.
- f. Monthly Inspection
 - i. Inspect the combustion air piping and flue gas vent piping for any indications of leakage, deterioration, and signs of blockage
 - ii. Examine the relief valve discharge pipe and boiler relief valve for any noticeable signs of leakage or weeping
 - iii. Investigate the condensing drain line, PVC fittings, drain system, and drian trap for any types of blockages if the system is a condensing boiler
 - iv. Check temperature readings and/or pressure readings to make sure all are within the designed range.
 - v. Closely watch for any error codes or service codes on the display panel if applicable.
- g. Periodic (every other month) Inspection
 - i. Visually examine boiler hydronic piping for leaks
 - ii. Inspect burner flame
 - iii. Low water cutoff test

J. Permits

a. The Contractor shall obtain and pay for necessary Municipal or State Inspection, Permit, or Signoff as required by New York law, rule, or regulation.

K. Preparation

- a. The Contractor is wholly responsible for the satisfactory completion of the boiler.
- b. Perform preparation in accordance with elevator manufacturer's instructions and as herein specified.

L. Maintenance

- a. Complete system shall be installed in strict compliance with manufacturers recommendations.
- b. Annual Service
 - i. Rigorously inspect the heating system and rectify any problems
 - ii. Clean and inspect the heat exchanger of the boiler
 - iii. Ensure all boiler connections and wiring is intact
 - iv. Make sure water pH levels are within the proper range
 - v. Inspect condensate system and clean and flush the system as necessary
 - vi. Examine and clean flame sensors, ignitor, and burner assembly
 - vii. Scrutinize the venting system for deterioration, corrosion, or blockage to ensure all pipe and joint connections are secure
 - viii. Survey the vent terminations and air inlet to make sure they're unobstructed and clear
 - ix. Check control settings as well as test safety controls and operating controls

M. Protection, Clean-Up, and Inspection

- a. Protection: Protect all adjacent work and materials including tenants' belongings, if applicable, against damage by suitable covering or other method prior to and during progress of work. Correction of work and damages, INCLUDING HOLES CREATED BY THE CONTRACTOR, is Contractors sole cost and responsibility. If tenant belonging is on the way of work, do not remove, relocate, or touch any tenant belongings, instead inform Hope Community Inc. for arrangements.
- b. Clean-Up: During progress of work, remove from site discarded materials at the end of each workday.
- c. Upon completion of work, the Contractor shall provide Hope Community Inc. with a signed statement that the system has been wired, tested, and functions properly according to the specifications.
- d. Nothing herein contained shall be construed to relieve the Contractor from furnishing a complete and acceptable electrical wiring system in all its categories.
- e. Hope Community Inc. will reject any materials or labor, which are or may become detrimental to the accomplishment of the intentions of these specifications.