

SECTION 15560

GAS FIRED HEATERS

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Gas-fired furnaces

- B. Related Section:
 - 1. Section 00700 "General Conditions."
 - 2. Section 00800 "Supplementary General Conditions."
 - 3. Section 07800 "Roof Penetrations"
 - 4. Section 15600 "Mechanical Materials & Methods."
 - 5. Section 15300 "Plumbing Piping."
 - 6. Section 15600 "Ductwork."

1.02 REFERENCES

- A. Comply with the following standards:
 - 1. ANSI Z83.9 - 1990, Gas-fired Duct Furnaces
 - 2. ANSI Z21.64 - 1990, Gas-fired Central Furnaces.

1.03 SUBMITTALS

- A. Product Data:
 - 1. Gas-fired furnaces

- B. Shop Drawings:
 - 1. Gas-fired furnaces

1.04 DELIVERY STORAGE AND HANDLING

- A. Packing and Shipping:
 - 1. Maintain the manufacturer's original packing and crating until the unit is on-site ready to be permanently installed.

- B. Acceptance at Site:
 - 1. Inspect the unit for damage as a result of shipping. Do not accept the unit if damaged and report the damage to the equipment manufacturer immediately.

- C. Storage and Protection:
 - 1. If the units are not going to be installed for more than two weeks from the time of delivery, store the units indoors, in the original packing and crating in an area safe from potential damaging acts to the units. The contractor shall be responsible for any and all damage to the units from the time of delivery until the project is accepted as complete by the owner.

1.05 WARRANTY

1. Provide manufacturer's one-year warranty on the complete unit.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. York International Corporation, National Account – Geoffrey Illian 405-419-6766
- B. Carrier Corporation
- C. The Trane Company
- D. Modine Manufacturing Company
- E. Sterling Equipment
- F. Reznor

2.02 EQUIPMENT

- A. General Description:
 1. Unit shall be factory-assembled, completely tested and inspected, ready for installation.
 2. Unit shall be indirect, induced combustion-type furnace, high efficiency automatic ignition, integral blower/motor assembly, controls, gas valve, heat exchanger, burner and unit casing.
- B. Unit Casing:
 1. Unit casing shall be minimum 18-gauge galvanized steel with a baked-enamel finish.
 2. Unit shall have removable panels to provide easy access to all serviceable components of the unit.
 3. Unit shall have filter rack to accommodate 1" disposable filters.
- C. Heat Exchanger:
 1. Heat exchanger shall be minimum 20-gauge aluminized steel and sectionalized design.
- D. Blower Motor Assembly:
 1. Blow and motor assembly shall be belt drive with adjustable or changeable sheaves. Blower motor shall have internal overload protection, permanently lubricated ball bearings and a minimum service factor of 1.15.

PART 3 - EXECUTION

3.01 INSTALLATION

A. General:

1. Rig the unit into place and support only as recommended by the manufacturer.
2. Locate the unit to maintain the minimum service and operational clearances as recommended by the manufacturer.
3. Install flexible connectors, electrical connections, and unit filters as instructed by the manufacturer.
4. Follow the unit manufacturer's instructions to place the unit into service.

3.02 FIELD QUALITY CONTROL

A. Tests

1. Cycle unit through all sequences of operation as recommended by the manufacturer. Check operation of all safety switches, lockouts, ect., and repair or replace any parts

3.03 DEMONSTRATION

- #### **A. Train Owner's representatives on procedures and schedules related to start-up, shutdown, troubleshooting, servicing, and preventative maintenance of the system. Schedule training with Owner's representative through the Architect.**

END OF SECTION