

SPECIAL SPECIFICATION

SECTION 15767S

HOT WATER UNIT HEATERS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Hot water unit heaters.
- B. Controls.

1.02 RELATED SECTIONS

- A. Section 13085S – Seismic Protection
- B. Section 15060S - Hangers and Supports.
- C. Section 15070S - Vibration Isolation.
- D. Section 15950S - Testing, Adjusting and Balancing.

1.03 REFERENCES

- A. AFBMA 9 - Load Ratings and Fatigue Life for Ball Bearings.
- B. AFBMA 11 - Load Ratings and Fatigue Life for Roller Bearings.
- C. AMCA 99 - Standards Handbook.
- D. AMCA 210 - Laboratory Methods of Testing Fans for Rating Purposes.
- E. AMCA 300 - Test Code for Sound Rating Air Moving Devices.
- F. AMCA 301 - Method of Publishing Sound Ratings for Air Moving Devices.
- G. AMCA 500 - Test Methods for Louver, Dampers, and Shutters.
- H. ARI 410 - Forced-Circulation Air-Cooling and Air-Heating Coils.

I. NFPA 90A - Installation of Air Conditioning and Ventilation Systems.

1.04 SUBMITTALS

- A. Include product data indicating unit dimensions, sections and finishes of materials, weight loading, required clearances, construction details and field connection details.
- B. Include electrical requirements for power supply wiring. Include wiring diagrams for interlock and control wiring, clearly indicating factory-installed and field-installed wiring.
- C. Provide operation and maintenance manual.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Dunham-Bush.
- B. McQuay.
- C. Modine.
- D. Trane.

2.02 MATERIALS

- A. Coils: Seamless copper tubing, 0.025-inch minimum wall thickness, silver brazed to steel headers, and with evenly spaced aluminum fins mechanically bonded to tubing.
- B. Casing: 18 gage steel with threaded pipe connections for hanger rods.
- C. Finish: Factory apply baked enamel on visible surfaces of enclosure or cabinet.
- D. Fan: Direct drive propeller type, statically and dynamically balanced with fan guard; horizontal models with permanently lubricated sleeve bearings; vertical models with grease lubricated ball bearings.
- E. Air Outlet: Adjustable pattern diffuser on projection models and two- or four-way louvers on horizontal throw models.

- F. Motor: Horizontal models with permanently lubricated sleeve bearings; vertical models with grease lubricated ball bearings.
- G. Control: Local disconnect switch provided by Division 16.
- H. Capacity: Based on 60 degrees F entering air temperature, 200 degrees F average water temperature.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Provide units with suitable connections for mounting as shown or as otherwise approved. Location of units as shown may be altered, subject to approval, if required to clear other equipment.
- B. Install units on vibration isolators.

END OF SECTION