

SECTION 15761 - AIR COILS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Hot-water coils
- B. Related Sections include the following:
 - 1. Division 15 Section "Control Systems Equipment" for coil temperature-control valve requirements.

1.3 SUBMITTALS

- A. Product Data: Include rated capacities of selected models; pressure drop; shipping, installed, and operating weights; installation instructions; and startup instructions for each type of product indicated.
- B. Coordination Drawings: Reflected ceiling plans drawn to scale and coordinating coil location and ceiling-mounted access panels.
- C. Maintenance Data: For air coils to include in maintenance manuals specified in Division 1.

1.4 QUALITY ASSURANCE

- A. 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.
- B. Comply with ARI 410, "Standard for Forced-Circulation Air-Cooling and Air-Heating Coils," for components, construction, and rating.
 - 1. Certify coils to ARI 410, "Standard for Forced-Circulation Air-Cooling and Air-Heating Coils."

PART 2 - PRODUCTS

2.1 MANUFACTURERS

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

- B. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
1. Water Coils:
 - a. Aerofin Corporation.
 - b. Carrier Corporation.
 - c. Coil Company Inc.
 - d. Dunham-Bush, Inc.
 - e. Heatcraft Inc.; Heat Transfer Division.
 - f. Trane Co. (The).
 - g. McQuay

2.2 HOT-WATER COILS

- A. Description: Self-draining coil fabricated to ARI 410.
- B. Piping Connections: Threaded, on same end.
- C. Tubes: Copper, complying with ASTM B 75.
1. Tube Diameter: 0.625 inch.
- D. Fins: Aluminum with fin spacing 0.125 inch.
- E. Fin and Tube Joint: Mechanical bond.
- F. Headers: Cast iron with drain and air vent tappings.
- G. Frames: Galvanized-steel channel frame, 0.052 inch.
- H. Ratings: Design tested and rated according to ASHRAE 33 and ARI 410.
1. Working Pressure Ratings: 200 psig, 325 deg F.
- I. Source Quality Control: Test to 300 psig, and to 200 psig underwater.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine ducts, plenums, and units to receive air coils for compliance with requirements for installation tolerances and other conditions affecting coil performance.
- B. Examine roughing-in for piping systems to verify actual locations of piping connections before coil installation.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Install coils level and plumb.

- B. Install coils in metal ducts and casings constructed according to SMACNA's "HVAC Duct Construction Standards, Metal and Flexible."

3.3 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 coils to allow service and maintenance.
- C. Unless otherwise indicated, connect piping with unions and shutoff valves to allow coils to be disconnected without draining piping. Refer to piping system Sections for specific valve and specialty arrangements.

3.4 ADJUSTING

- A. Straighten bent fins on each air coil.

3.5 CLEANING

- A. After completing system installation, including outlet fitting and devices, inspect exposed finish. Remove burrs, dirt, and construction debris and repair damaged finishes.
- B. Clean coils using materials and methods recommended in writing by manufacturers, and clean inside of casings and enclosures to remove dust and debris.

END OF SECTION 15761