**AH Series Unit Specifications**

**PART 1 GENERAL**

**1.01 SUBMITTALS**

A. Submit shop drawings and product data sheets indicating cross section of cabinets, general assembly, and materials

used in fabrication.

B. Submit product data indicating typical catalog of information including arrangement.

C. Indicate mechanical and electrical service locations and requirements, specifically indicating deviations from indicated products.

D. Submit manufacturer’s installation instructions.

**1.02 OPERATION AND MAINTENANCE DATA:**

A. Submit piping instructions.

B. Include manufacturer’s descriptive installation, operating and maintenance instructions.

**1.03 QUALIFICATIONS:**

A. Manufacturer Company specializing in manufacturing the products specified in this section with minimum 10 years documented experience.

**1.04 REGULATORY REQUIREMENTS**

A. Units must be UL listed as air handler unit.

B. Unit performance data must be rated in accordance with ARI standard 440 and must display the ARI symbol on all standard units. If a manufacturer does not participate in the ARI Certification program, specified equipment must be witnessed by an engineer to meet the criteria of the specifications.

C. Conform to applicable NFPA 70 code for internal wiring of factory wired equipment.

**1.05 WARRANTY:**

A. Provide a full parts warranty for one year from startup or 18 months from shipment, whichever comes first.

**PART II PRODUCTS**

**2.01 AIR HANDLERS:**

**A. Coils:**

1. Coils are 100% underwater pressure-tested at 350 psi with 300 psi working pressure. Steam coils are rated

for up to 15 psi or 250 degrees F.

2. Copper tubes are constructed as ½” O.D. with .017” wall thickness; tubes are staggered for maximum heat

transfer.

3. Evenly spaced aluminum fins are high-efficiency, .0045” thick double-sine with rippled edges spaced at 12-

fins-per-inch.

4. Manual air vent is standard on all hydronic coils.

**B. Cabinet:**

1. Basic cabinet includes a galvanized steel cabinet, coil, belt-driven, forward-curved blower, motor and drive

package. A flat filter section with a two-inch, 30-percent efficiency filter is included. Access doors are

provided on both sides of the unit for easy maintenance. A one-inch duct collar is provided for both supply and return-air.

2. 800 to 2,000 CFM models have holes with welded nuts in each top corner to accept .375-16 threaded

overhead suspension rods. 3,000 to 12,000 models have heavy-gauge galvanized channels on the unit bottom for hanger rods and/or vibration isolation. Channels are optional for 800 to 2,000 CFM units.

**C. Cabinet Insulation:**

2. All units have ½ inch thick, over three-pound density neoprene-coated fiberglass. This type of insulation has greater thermal efficiency and lower noise levels.

**D. Drain Pan:**

1. Constructed of galvanized steel with powder-coated epoxy with ¼” closed cell insulation. This helps assure

sweat-proof operation under adverse dew-point conditions.

2. Provide a primary and secondary drain connection. Drain pans are trapped for positive condensate drainage.

**E. Blowers:**

1. Double-width, double-inlet, forward curved blade and centrifugal wheels that are statically and dynamically

balanced. Blowers are draw-through design, generously sized for low-outlet velocities and quiet operation.

Blower scrolls and wheels are galvanized for rust-free operation, and permanently lubricated ball bearings

ensure long-service life.

2. Units with 800-3,000 CFM, a single, belt-driven, forward curved blower assembly is included. 4,000-12,000

CFM has a double, belt-driven, forward curved blower assembly. Class 1 blowers can handle up to 3.5 inches

of total static pressure.

**F. Drives and Pulleys:**

1. Fitted drives are adjustable V-belt type, with variable pitch-drive sheave and pulleys are cast iron and keyed to motor shafts.

**G. Motors:**

1. Factory installed motors on heavy-duty steel mounts. Mounts designed to maintain precise alignment and

simplify belt adjustment. Set midpoint to meet the specified CFM and total static pressure

2. Belt Drive motors are open drip-proof, ball bearing, single speed, rated at continuous duty, ambient, with

reversible rotation.

3. Standard single-phase motors are resilient base, capacitor start and include built-in thermal overload

protection.

4. Standard three-phase motors are rigid base and have no overload protection.

5. High efficiency motors E-Plus meet the requirements of the latest Epact standards.

**H. Filter:**

1. Two-inch thick, 30/30 pleated filter, flatly mounted, with spring-loaded clips on each side of the access door

for easy maintenance without the use of tools.

**I. Service Access:**

1. Units are designed with access doors on both sides; removal of only two screws ensures that all internal

components are easily accessible for fast service.

**J. Tagging & Crating:**

1. All units individually tagged and protected by custom wooden-crates to ensure damage-free units will arrive at your job site.

2. All fan coils are 100% tested prior to shipment.