

Copyright 2003 and 2005 by The American Institute of Architects (AIA)

Exclusively published and distributed by Architectural Computer Services, Inc. (ARCOM) for the AIA

## SECTION 238219 - FAN COIL UNITS

### 1.1 SUMMARY

- A. Factory-packaged and -tested units rated according to ARI 440, ASHRAE 33, and UL 1995.
- B. **[Vertical]** **[Horizontal]** **[Stacked]** Fan-Coil Units: Hydronic cooling coil and **[hot-water]** **[steam]** **[electric]** **[heating]** **[and reheat]** coil.
- C. **[Vertical]** **[Horizontal]** Ducted Fan-Coil Units: **[Hydronic]** **[Direct-expansion]** cooling coil and **[hot-water]** **[steam]** **[electric]** **[heating]** **[and reheat]** coil.

### 1.2 MANUFACTURED UNITS

- A. Fan-Coil Units:
  - 1. Insulation: 1-inch (25-mm) **[coated glass fiber]****[foil-covered, closed-cell foam]** **[matte-finish, closed-cell foam]**.
  - 2. Drain Pans: **[Plastic]** **[Stainless steel]** **[Insulated galvanized steel with plastic liner]**.**[ Drain pans shall be removable]**.
  - 3. Chassis: Galvanized steel where exposed to moisture.
  - 4. Cabinet: Steel with **[factory prime coating, ready for field painting]** **[baked-enamel finish in manufacturer's standard paint color as selected by Architect]** **[baked-enamel finish in custom paint color as selected by Architect]**.
  - 5. Outdoor-Air Wall Box: Aluminum, rain-resistant **[horizontal]** **[vertical]**; **[aluminum]** **[steel]** louver with integral eliminators and bird screen.
  - 6. Outdoor-air damper with **[electronic]** **[pneumatic]** controls.
  - 7. Filters: **[Washable foam]** **[Glass fiber]** **[Pleated cotton-polyester media]**.
  - 8. Hydronic Coils: Copper tube with aluminum fins.
  - 9. Steam Coils: Copper tube with aluminum fins**;** **[distributing type]**.
  - 10. Electric-Resistance Heating Coils: Nickel-chromium wire, with high-temperature safety.
  - 11. Fan and Motor Board: Removable.
    - a. Fan: Double width, forward curved, centrifugal.
    - b. Motor: Permanently lubricated, multispeed.
  - 12. Hydronic Piping Package:
    - a. **[Two]** **[Three]**-way, **[two-position]** **[modulating]** coil control valves.
    - b. Two-piece ball valves, **[calibrated orifice balance valves,]** **[automatic flow-control valves,]** Y-pattern strainers, wrought copper unions, and risers for stacked units.

13. Unit Control: [**Wall-mounting**] [**Unit-mounted**] [**thermostat**] [**humidistat**], and [**DDC**] [**terminal controller**] [**BAS interface**].

B. Ducted Fan-Coil Units:

1. Insulation: [**1/2-inch (13-mm)**] [**1-inch (25-mm)**] [**coated**] [**foil-faced**] glass fiber.
2. Drain Pans: [**Plastic**] [**Stainless steel**] [**Insulated galvanized steel with plastic liner**].
3. Chassis: Galvanized steel where exposed to moisture.
4. Cabinet: Steel with baked-enamel finish in manufacturer's standard paint color.
5. Mixing Plenum: Outdoor- and return-air dampers with [**electronic**] [**pneumatic**] controls.
6. Filters: [**Washable foam**] [**Glass fiber**] [**Pleated cotton-polyester media**].
7. Hydronic Coils: Copper tube with aluminum fins.
8. Steam Coils: Copper tube with aluminum fins[; **distributing type**].
9. Indoor Refrigerant Coils: Copper tube with aluminum fins.
10. Electric-Resistance Heating Coils: Nickel-chromium wire, with high-temperature safety.
11. Direct-Driven Fans: Double width, forward curved, centrifugal; with permanently lubricated, multispeed motor resiliently mounted in the fan inlet.
12. Belt-Driven Fans: Double width, forward curved, centrifugal; with permanently lubricated, single-speed motor installed on an adjustable, resiliently mounted fan base.
13. Hydronic Piping Package:
  - a. [**Two**] [**Three**]-way, [**two-position**] [**modulating**] coil control valves.
  - b. Two-piece ball valves, [**calibrated orifice balance valves,**] [**automatic flow-control valves,**] Y-pattern strainers, wrought copper unions, and risers for stacked units.
14. Unit Control: [**Wall-mounting**] [**Unit-mounted**] [**thermostat**] [**humidistat**], and [**DDC**] [**terminal controller**] [**BAS interface**].

END OF SECTION 238219